



Corridor Study - Red Lodge North Environmental Assessment & Section 4(f) Evaluation

Project Number
STPP 28-2(25)70

Control Number
4375

Carbon County, Montana

October 2008

**Environmental Assessment & Section 4(f) Evaluation
Corridor Study – Red Lodge North
STPP 28-2 (25) 70
(Control Number 4375)
Carbon County, Montana**

This document is prepared in conformance with the Montana Environmental Policy Act (MEPA, 75-1-201 MCA) requirements and contains the information required for an Environmental Assessment (EA) under the provisions of Administrative Rules of Montana (ARM) 18.2.237(2) and 18.2.239. This EA is also prepared in conformance with the National Environmental Policy Act (NEPA) requirements for an Environmental Assessment under 23 CFR 771.119, and Section 4(f) of the United States Department of Transportation Act under 23 CFR 774.

Submitted pursuant to 42 USC 4332(2)(c), 49 USC 303,
Sections 75-1-201 & 2-3-104, MCA and Executive Orders 11990, 11988, and 12898
by the

United States Department of Transportation, Federal Highway Administration
and the

Montana Department of Transportation

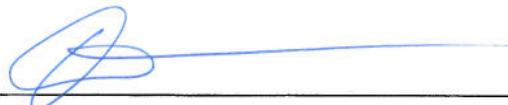
Cooperating Agencies:

US Army Corps of Engineers

City of Red Lodge

Carbon County

Submitted by:



Montana Department of Transportation

Date:

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ABSTRACT: The proposed action is to reconstruct approximately 21.2 miles (34.1 kilometers) of US Highway 212 between Red Lodge and Boyd, Montana. The proposed project starts at 8th Street in Red Lodge and ends approximately 1,000 feet (304.8 meters) north of Boyd. The purpose of the proposed project is to improve the roadway deficiencies and to improve the safety and operational characteristics of the roadway.

Comments on this Environmental Assessment & Section 4(f) Evaluation are due by _____, and should be sent to Tom S. Martin, Montana Department of Transportation, at the address above. This document may also be viewed on the MDT website at http://www.mdt.mt.gov/pubinvolve/eis_ea.shtml. MDT attempts to provide accommodations for any known disability that may interfere with a person participating in any service, program or activity of the Department. Alternative accessible formats of this information will be provided upon request. For further information call (406) 444-6331 or TTY (800) 335-7592, or by calling Montana Relay at 711.

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APPENDIX A

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APPENDIX E

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APPENDIX F

Section 4(f) Properties

APPENDIX G

Section 4(f) De Minimis Evaluations

Acronym List

AADT	Average Annual Daily Traffic
AASHTO	American Association of State Highway Transportation Officials
ADA	Americans with Disabilities Act
ARM	Administrative Rules of Montana
AVC	Animal-Vehicle Collision
BMP	Best Management Practice
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CFS	Cubic Feet Per Second
CTEP	Community Transportation Enhancement Program
CWA	Clean Water Act
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
KL&J	Kadmas, Lee & Jackson, Inc.
KPH	Kilometers Per Hour
LOS	Level of Service
LUST	Leaking Underground Storage Tank
MCA	Montana Code Annotated
MDEQ	Montana Department of Environmental Quality
MDT	Montana Department of Transportation
MCA	Montana Code Annotated
MT FWP	Montana Fish, Wildlife and Parks
MLR	Montana Land Reliance
MOA	Memorandum of Agreement
MPDES	Montana Pollutant Discharge Elimination System
MPH	Miles Per Hour
MSAT	Mobile Source Air Toxics
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
RCRA	Resource Conservation and Recovery Act
RDM	Road Design Manual

SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SHPO	State Historic Preservation Officer
SPA	Stream Protection Act
STIP	State Transportation Improvement Program
SWLF	Solid Waste Landfill
TWLTL	Two-way Left-Turn Lane
USACE	United States Army Corps of Engineers
USC	United States Code
USFWS	United States Fish and Wildlife Service
UST	Underground Storage Tank
VMT	Vehicle Miles Traveled

Approximate Route Post Key	
Location	Route Post
Project Corridor	69.83 to 91.00
Red Lodge	69.83 to 71.54
Oakes Avenue	69.85
MT Highway 78 / US Highway 212	70.19
Developed Limits of Red Lodge	70.68
Two Mile Bridge Road	71.54
Red Lodge to Roberts	71.54 to 81.84
Approximate Northbound Passing Zone Location	72.0 to 74.0
Fox Road (Approximate Bus Turnaround Location)	76.86
Roberts	81.84 to 82.62
South End of Roberts	81.84
Cooney Dam Road (Roberts)	82.45
North End of Roberts	82.62
Roberts to Boyd	82.62 to 91.00
Approximate Northbound Passing Zone Location	82.7 to 83.7
Clear Creek Road	84.55
District Boundary (Approximate Bus Turnaround Location)	87.58
Approximate Southbound Passing Zone Location	90.2 to 88.2
Cooney Dam Road (Boyd)	90.70
Boyd Country Store (Main Street)	90.77

Conversion Table	
Metric	English
1 meter	3.281 feet
1 kilometer	0.621 miles
1 hectare	2.471 acres
English	Metric
1 foot	0.305 meters
1 mile	1.609 kilometers
1 acre	0.405 hectares

EXECUTIVE SUMMARY
CORRIDOR STUDY – RED LODGE NORTH
PROJECT NUMBER: STPP 28-2(25)70, CONTROL NUMBER: 4375

I. INTRODUCTION

The MDT (Montana Department of Transportation) plans to reconstruct approximately 21.2 miles (34.1 kilometers) of US Highway 212 in Carbon County. The proposed project begins at 8th Street in Red Lodge and continues generally north-northeast to approximately 1,000 feet (305 meters) north of Boyd.

The existing facility is a rural two-lane roadway with 12-foot (3.6-meter) driving lanes and approximately 2-foot (0.6-meter) shoulders. The proposed project corridor extends through the northern portion of the city of Red Lodge and through the unincorporated communities of Fox, Roberts, and Boyd. *See Figure 1-1, Project Location Map, on page 1-2.*

US Highway 212 in the project area is functionally classified as a rural minor arterial and is on Montana's Primary Highway System. US Highway 212 serves local, commuter, tourist, and agricultural traffic and is considered an integral part of the regional transportation network. In addition, US Highway 212 connects a number of local roads to the regional transportation network.

MDT estimates \$21.3 million will be available for projects on this corridor from the SAFETEA-LU Section 1934 Transportation Improvement Project #246 to develop and construct US 212 Red Lodge North. At this time, the top priorities for construction are the city of Red Lodge and the community of Roberts. The other segments (between Red Lodge and Roberts as well as Roberts and Boyd) of the project would be constructed as funding becomes available.

II. PURPOSE AND NEED FOR THE PROJECT

The purpose of the proposed project is to improve the safety and operational characteristics of the roadway, as discussed below. Safety and operational concerns along the project corridor include:

- *Pavement*—Nineteen of the 21 miles (30.6 of the 33.8 kilometers) of the project corridor have exceeded the design life for asphalt pavement.
- *Intersections*—Numerous intersections along the project corridor have geometric deficiencies, meaning they are either skewed or offset. Two intersections in Red Lodge also have inadequate capacity for anticipated future traffic.
- *Access*—MDT worked with the City of Red Lodge to develop an access management plan for US Highway 212, between MT Highway 78 and Two Mile Bridge Road.
- *Pedestrian/Bicycle Facilities*—There are discontinuous sidewalks and no bicyclist accommodations along the project corridor. *The City of Red Lodge Comprehensive Trails Plan* of May 2006 identified the need for sidewalk and shared bike/ped path facilities along US Highway 212 within Red Lodge.
- *LOS (level of service)*—Based on increased traffic, the existing two-lane roadway does not provide an adequate LOS along the rural segments. Two intersections in Red Lodge would also provide inadequate LOS by the project design year.

- *Shoulders*—The existing 2-foot (0.6-meter) roadway shoulders are narrow, and the public has indicated support for wider shoulders to accommodate emergency parking, wide agricultural vehicles, etc.
- *Ditch Slopes*—Many of the roadside ditches along the project corridor have steep slopes. A flatter inslope is considered more desirable for a roadway such as US Highway 212 in that an errant vehicle has a greater chance of recovery.
- *Clear Zones*—Obstacles are present to various degrees within the clear zone along US Highway 212.
- *Safety*—In the 15-year analysis period (1992-2006), ten fatal crashes were reported within the project corridor, all at different locations. Additionally, this corridor has a higher than statewide average crash history.

i. Project Objectives

The overall project objective is to improve safety and operational characteristics of the roadway by improving roadway deficiencies to meet MDT and AASHTO (American Association of State Highway and Transportation Officials) standards to the greatest extent practicable. Listed below are specific project objectives.

- Improve pavement condition along the project corridor.
- Improve intersection geometry at key locations.
- Manage access in north Red Lodge.
- Accommodate pedestrian/bicycle users in Red Lodge.
- Improve LOS in rural segments and at two intersections in Red Lodge.
- Provide wider shoulders in rural segments.
- Flatten ditch inslopes in rural segments.
- Reduce encroachments within clear zones where appropriate.
- Increase ditch storage for snow/ice off the roadway in rural segments.
- Reduce frequency of animal-vehicle collisions along project corridor.
- Reduce differential speed conflicts with turning vehicles in Red Lodge and Roberts.

ii. Supporting Element

Public concerns have been raised throughout the project planning process regarding highway-related storm water drainage in Red Lodge and Roberts. Public concerns in Roberts were exacerbated due to flooding occurring in May 2005 and June 2007. As a result, improving highway-related storm water drainage through Red Lodge and Roberts has been identified as a supporting element of this project.

III. ALTERNATIVES

Analysis of the US Highway 212 project corridor resulted in the development of a no-build alternative (Alternative A) and a build alternative (Alternative B), which is the Preferred

Alternative. Because the project corridor is relatively long (approximately 21.2 miles [34.1 kilometers]), and the character and needs of the adjacent communities change along this length, the project corridor will be discussed as four segments: Red Lodge, Red Lodge to Roberts, Roberts, and Roberts to Boyd. See *Figure 2-1, Segment/Intersection Locations*, on page 2-3.

i. Alternative A: No-Build

Alternative A would leave the existing roadway in place as it exists today, with a continuation of current maintenance practices. This would not meet the project objectives. There would be no construction costs associated with Alternative A, aside from routine maintenance.

ii. Alternative B: Preferred Alternative

Alternative B would meet the project objectives. The Preferred Alternative would:

- Improve the pavement condition along the project corridor by reconstructing the roadway.
- Improve the intersection geometry at key locations along the corridor.
- Incorporate an Access Management Plan for Red Lodge, which was supported by the Red Lodge City Council in March 2007. See *Appendix A, Letter #8*.
- Provide pedestrian and bicycle facilities in Red Lodge.
- Improve LOS by providing passing lanes in rural segments where appropriate and making improvements at the 8th Street/US Highway 212 and MT Highway 78/US Highway 212 intersections.
- Provide wider roadway shoulders in rural segments where appropriate.
- Flatten ditch slopes in rural segments where appropriate.
- Reduce clear zone encroachments in rural segments where appropriate.
- Provide increased snow storage with wider and deeper roadside ditches in rural segments where appropriate.
- Clear thick brush and trees within the clear zone to improve driver visibility of approaching wildlife.
- Provide turning lanes where needed to reduce differential speed conflicts.
- Improve highway-related storm water drainage in Red Lodge and Roberts.

a. Red Lodge (8th Street to Two Mile Bridge Road)

The project corridor in Red Lodge consists of three distinct sub-segments: 8th Street to MT Highway 78, MT Highway 78 to developed limits of Red Lodge, and developed limits of Red Lodge to Two Mile Bridge Road.

Typical Sections

- Eighth Street to MT Highway 78. See *Figure 2-3, 8th Street to MT Highway 78*, on page 2-8.
 - 44-foot (13.2-meter) curb-to-curb urban section
 - Two 12-foot (3.6-meter) travel lanes
 - Two 10-foot (3.0-meter) parking lanes
 - Two 5-foot (1.5-meter) sidewalks

- MT Highway 78 to the developed limits of Red Lodge. *See Figure 2-5, MT Highway 78 to Developed Limits of Red Lodge, on page 2-10.*
 - 49-foot (14.9-meter) curb-to-curb section
 - Two 12-foot (3.6-meter) travel lanes
 - Two 5.5-foot (1.7-meter) shoulders
 - One 14-foot (4.2-meter) TWLTL (two-way left-turn lane)
 - One 5-foot (1.5-meter) sidewalk on the west side of the roadway
 - One 10-foot (3.0-meter) shared bike/ped path on the east side of the roadway
- Developed limits of Red Lodge to Two Mile Bridge Road. *See Figure 2-6, Developed Limits of Red Lodge to Two Mile Bridge Road, on page 2-11.*
 - 55-foot (15.8-meter) rural section
 - Two 12-foot (3.6-meter) travel lanes
 - One 13-foot (3.9-meter) raised median
 - Two 5.5-foot (1.7-meter) shoulders
 - Two 3.5-foot (1.05-meter) median shoulders
 - One 10-foot (3.0-meter) shared bike/ped path on the east side of the roadway

Drainage

The urban-developed portion of Red Lodge within the project limits extends from 8th Street to an area approximately 1,500 feet (460 meters) north of MT Highway 78. Within this area, a curb and gutter section and storm water conveyance system (such as a storm drain, trunk line, and/or open ditch) are proposed to accommodate highway-related storm drainage. North of the developed limits of Red Lodge, the typical section of the roadway is anticipated to change from an urban section to a more rural section, which would likely include roadside ditches. If a suitable location for a storm water conveyance system outfall is not identified before the start of the rural typical section, then the storm water conveyance system may discharge into the roadside ditches and flow north to an outfall location to Rock Creek.

Intersections

The proposed project would realign Oakes Avenue to directly oppose 7th Street and convert it to a southbound one-way street. Diagonal parking would be provided on both sides of the street. Additionally, a bulbed out curb line would be constructed along US Highway 212 at the Carnegie Library to improve sight distance at 8th Street. A traffic signal would be installed when warranted and justified; it is anticipated that signal warrants may be met by 2020. *See Figure 2-7, Oakes Avenue/8th Street Intersections, on page 2-13.*

The proposed project would also replace the MT Highway 78 and US Highway 212 intersection with a single lane roundabout. In addition, the intersection of Villard Avenue and MT Highway 78 would be closed. A cul-de-sac would be constructed at Villard Avenue just south of MT Highway 78. Fourth Street would be extended along the south side of the Visitor Center between US Highway 212 and Villard Avenue, replacing the Visitor Center's south access. *See Figure 2-8, MT Highway 78/Villard Avenue Intersections, on page 2-15.*

Access Management

At the request of the City of Red Lodge, MDT and the City of Red Lodge developed an Access Management Plan for the area between MT Highway 78 and Two Mile Bridge Road. The purpose of the Access Management Plan is to provide a means for MDT and the City to balance

the need for vehicular progression along US Highway 212 with the need for access to adjacent properties.

A shared TWLTL is proposed for the developed area immediately north of MT Highway 78 to accommodate turning vehicles accessing adjacent properties while improving progression for through traffic. Future access types and locations have been identified for the developing area south of Two Mile Bridge Road. See *Figure 2-9, Developed and Developing Limits of Red Lodge*, on page 2-16. The City of Red Lodge supported the Access Management Plan with Resolution 3228. Pursuant to applicable Montana statutes and MDT policy, the plan would be recommended to the Montana Transportation Commission for their adoption. See *Figure 2-10, Access Management Plan Overview*, on page 2-17 and *Appendix A, Letter #8*.

b. Red Lodge to Roberts

The Preferred Alternative includes one typical section and drainage improvements for US Highway 212 between Red Lodge and Roberts.

Typical Section

- Two Mile Bridge Road to the south end of Roberts. See *Figure 2-15, Two Mile Bridge to the south end of Roberts*, on page 2-21.
 - 40-foot (12.0-meter) rural section
 - Two 12-foot (3.6-meter) travel lanes
 - Two 8-foot (2.4-meter) shoulders
 - A bus turnaround approximately one-mile (1.6 kilometers) north of Fox Road at the present state maintenance site
 - A one-mile (1.6-kilometer) northbound passing lane north of Two Mile Bridge Road

Drainage

Some culverts between Red Lodge and Roberts carry water generally from the west side of the roadway to the east side of the roadway. The existing drainage patterns generally parallel the roadway northward. Drainage patterns and culvert locations are expected to remain the same with implementation of the proposed project. Numerous irrigation ditches are currently located within the right-of-way limits of the proposed project. The proposed project may involve relocating those irrigation ditches outside of the proposed right-of-way, in accordance with MDT's general practice.

c. Roberts

The Preferred Alternative within Roberts includes one primary typical section, drainage improvements, intersection improvements, and safety improvements for pedestrians.

Typical Section

- South end of Roberts to East Maple Street. See *Figure 2-17, South End of Roberts to East Maple Street*, on page 2-23.
 - 46-foot (13.8-meter) rural section
 - Two 12-foot (3.6-meter) travel lanes
 - Two 4-foot (1.2-meter) shoulders

- One 14-foot (4.2 meter) TWLTL

A modification of the typical section was developed for the sub-segment between East Maple Street and the north end of Roberts to avoid impacts to Roberts School and to meet the request of Roberts School for a guardrail along school property.

- East Maple Street to the north end of Roberts. *See Figure 2-18, East Maple Street to North End of Roberts, on page 2-24.*
 - 46-foot (13.8-meter) rural section
 - Two 12-foot (3.6-meter) travel lanes
 - Two 4-foot (1.3-meter) shoulders
 - One 14-foot (4.2-meter) TWLTL
 - A 2:1 inslope with guardrail on the east side of the roadway

Drainage

A large drainage area lies west of the roadway. Within this area, flood irrigation operations contribute additional water to the drainage. The drainage parallels the roadway from south of the Fox Road and drains northward along the west edge of Roberts. Because the portion of Roberts west of the roadway sits in one of the swales of the drainage, the potential exists to flood homes in Roberts, as occurred in 2005 and 2007. It is beyond the scope of this project to address floodwaters entering Roberts from the drainage to the west. Goals of the proposed project would be to convey as much highway-related storm water as practicable toward Rock Creek prior to Roberts, and within Roberts to satisfactorily convey storm water intercepted by the highway towards Rock Creek.

Within the community of Roberts, it is anticipated that runoff from the roadway would be directed to open ditches and/or pipes. The ditches and/or pipes would carry the runoff to roadside ditches located north of Roberts.

Intersection

The Preferred Alternative would realign Cooney Dam Road to form a single intersection perpendicular with US Highway 212 approximately 430 feet (130 meters) north of East Maple Street. *See Figure 2-19, Cooney Dam Road Intersection (near East Maple Street), on page 2-26.*

Pedestrian Facilities

The Preferred Alternative would include one new block of sidewalk along Pine Street from US Highway 212 east to connect to the existing sidewalk on First Street. Crosswalks would also be provided at the intersections of Oak, Cedar, Pine, and East Maple Streets along US Highway 212. School advance warning and school crosswalk warning signs, including flashing beacons, would be installed in accordance with current design guidelines.

d. Roberts to Boyd

For the area from Roberts to Boyd, the Preferred Alternative includes one primary typical section, drainage improvements, and intersection improvements at three locations.

Typical Section

- North end of Roberts to Boyd. *See Figure 2-21, North End of Roberts to Boyd, on page 2-29.*
 - 40-foot (12.0-meter) rural section
 - Two 12-foot (3.6-meter) travel lanes
 - Two 8-foot (2.4-meter) shoulders
 - A bus turnaround approximately 3 miles (4.8 kilometers) south of Boyd at the school district boundary
 - A one-mile (1.6-kilometer) northbound passing lane immediately north of Roberts
 - A one-mile (1.6-kilometer) southbound passing lane south of Boyd

The exception of this typical section would be at the Boyd Country Store where measures were taken to avoid the store and improve safety conditions.

- Boyd Country Store. *See Figure 2-22, North End of Roberts to Boyd – Boyd Country Store, on page 2-30.*
 - 52-foot (15.6-meter) rural section
 - Two 12-foot (3.6-meter) travel lanes
 - Two 8-foot (2.4-meter) shoulders
 - A 12-foot (3.6 meter) southbound left-turn lane
 - A reverse curb to delineate the Boyd Country Store parking lot from the roadway and to manage access to US Highway 212.

Drainage

Existing drainage patterns and culvert locations are expected to remain the same in the design of the proposed project. Several irrigation ditches that are currently located within the right-of-way limits for the proposed project are expected to be relocated outside of the new right-of-way in accordance with MDT's general practice.

Intersections

The Preferred Alternative would realign Clear Creek Road with the south access of the rest area. Improvements to the rest area sidewalks and ramps may be included as part of the proposed project. *See Figure 2-23, Clear Creek Road Intersection, on page 2-32.*

The Preferred Alternative would also close the northern fork of Cooney Dam Road and add a southbound right-turn lane on US Highway 212 to Cooney Dam Road. *See Figure 2-24, Cooney Dam Road and Main Street Intersections, on page 2-33.*

Additionally, the Preferred Alternative would realign Main Street to be perpendicular with US Highway 212. A southbound left-turn lane would be added on US Highway 212 to provide protection for slowed or stopped traffic accessing Main Street. A reversed curb line would be constructed between the Boyd Country Store parking lot and US Highway 212 to delineate access. Access to the Boyd Country Store would be provided off of Main Street. *See Figure 2-24, Cooney Dam Road and Main Street Intersections, on page 2-33.*

IV. AFFECTED ENVIRONMENT, IMPACTS, & MITIGATION

The following table provides a summary of environmental impacts and mitigation measures associated with each alternative. *See Table A, Summary Comparison of Project Alternatives and Impacts.*

Table A
Summary Comparison of Project Alternatives and Impacts

Resource		Alternative A: No-Build	Alternative B: Preferred	Proposed Mitigation
Land Use		No impact.	Acquisition of approximately 317.2 acres (128.4 hectares) of right-of-way would create direct land use impacts; overall land uses in the area would not be affected.	No mitigation required.
Farmland		No Impact.	Impacts to approximately 275.8 acres (111.6 hectares) of farmland; of which 89.6 acres (36.3 hectares) are prime farmland and 48.9 acres (19.8 hectares) are of statewide importance.	No mitigation required.
Transportation System	Traffic	Inadequate LOS currently at northbound lane between Roberts and Boyd; southbound lane between Red Lodge and Roberts by 2010; and MT Highway 78 and 8 th Street by 2030.	All segments and key intersections expected to operate at acceptable levels through 2030.	No mitigation required.
	Access	Inconsistent with Red Lodge Council Resolution No. 3228.	The ability of the roadway to provide for both access and progression would be improved. Access would be managed between MT Highway 78 and Two Mile Bridge Road. Consistent with Red Lodge Council Resolution No. 3228.	No mitigation required.
	Safety	The number of crashes and existing crash rates are anticipated to increase as traffic continues to increase.	Would include the following safety improvements: intersection realignments, addition of turn lanes where needed, access management in Red Lodge, wider shoulders, flatter ditch slopes, clearing of thick brush and trees within the clear zone, ped/bike facilities in Red Lodge and Roberts, bus turnarounds.	No mitigation required.
	Pedestrian/Bicycle Facilities	Inconsistent with Red Lodge Comprehensive Trails Plan.	Would provide sidewalks and crosswalks, where appropriate, in Red Lodge; a shared bike/ped path between MT Highway 78 and Two Mile Bridge Road; and crosswalks and one-block of sidewalk in Roberts. Consistent with Red Lodge Comprehensive Trails Plan.	No mitigation required.

Continued...

Table A
Summary Comparison of Project Alternatives and Impacts

Resource		Alternative A: No-Build	Alternative B: Preferred	Proposed Mitigation
Noise		No impact.	By 2030, five residential properties would experience noise levels at or slightly above the noise abatement criteria.	At this time, noise mitigating measures are not considered reasonable and feasible.
Right-of-Way and Relocations		No impact.	Acquisition of approximately 317.2 acres (128.4 hectares) of right-of-way; potential acquisition and/or relocation of up to nine structures (six dwellings, two out-buildings, and one commercial building).	Compliance with Uniform Act. MDT will also attempt to meet individually with affected property owners. Reasonable efforts to avoid and/or minimize impacts will be made.
Water Resources/Quality	Surface Water	No new impacts.	Impacts may result from culvert replacement or extension; ditch realignment; dredge/fill activities in wetlands; the relocation of irrigation ditches outside of the proposed right-of-way; new storm water outfall locations at Rock Creek; and conflict between existing storm drain and new storm drain near the intersection of MT Highway 78 and US Highway 212.	Use of BMPs; compliance with applicable permits, and local, state, and federal regulations.
	Irrigation Facilities	No new impacts.	Would relocate irrigation ditches, as necessary, in consultation with owners to minimize impacts and may impact Mullaney Spring.	Care to avoid altering flow rate to water rights holder of Mullaney Spring. Consultation with affected ditch associations and other landowners/water rights holders to minimize impacts to irrigation facilities.
	Ground Water	No new impacts.	Impacts to ground water resources are not anticipated. The Preferred Alternative may require relocation of domestic wells within the proposed right-of-way.	If domestic wells are displaced, domestic water would be restored to the affected properties.
	Public Water Systems	No new impacts.	No new impacts anticipated.	No mitigation required.
	Waste Water Systems	No new impacts.	Potential relocation of an identified mound septic system in the proposed right-of-way and construction limits. A new storm drain pipe and outfall may need to be constructed or the existing storm drain replaced.	If the mound system were impacted, MDT would relocate the system per County and MDEQ requirements.

Continued...

Table A
Summary Comparison of Project Alternatives and Impacts

Resource		Alternative A: No-Build	Alternative B: Preferred	Proposed Mitigation
Water Body Modifications		No new impacts.	New culvert installation at Stanley Creek and minor inlet and outlet ditches may be required; irrigation ditches would be relocated outside of right-of-way.	Structures would be designed to minimize disruption to hydrology and to comply with applicable federal and state regulations.
Wetlands		No new impacts.	Impacts to approximately 40.7 acres (16.5 hectares) of wetlands; of which 24.8 acres (9.7 hectares) are jurisdictional based on preliminary jurisdictional determinations.	Unavoidable impacts would be mitigated according to permit requirements at an approved mitigation site.
Wildlife Habitat and Ecosystems	Vegetation	No new impacts.	Removal of vegetation in select areas for proposed improvements. Clearing of ground cover along the corridor has the potential to open areas to noxious weeds.	Compliance with MDT Standard Specifications.
	Terrestrial and Avian Species	No new impacts.	May result in minor fragmentation, modification, and/or loss of habitat for terrestrial and avian species.	Use of BMPs; implementation of erosion and sediment control plan; compliance with Migratory Bird Treaty Act and MDT's most current depredation permit from the USFWS.
	Aquatic Species	No new impacts.	May result in minor impacts due to water body modifications. No substantive losses of spawning fish species are anticipated.	Use of BMPs; compliance with applicable permits and federal and state regulations.
	Montana Species of Concern	No new impacts.	Impacts are not anticipated; however, the gray wolf would be subject to the same impacts as other terrestrial species.	No mitigation required.
	Animal-Vehicle Collisions	High frequency of animal-vehicle collisions would continue.	May improve driver visibility of approach wildlife by removing thick brush and vegetation from the clear zone.	No mitigation required.

Continued...

Table A
Summary Comparison of Project Alternatives and Impacts

Resource		Alternative A: No-Build	Alternative B: Preferred	Proposed Mitigation
Floodplain		No new impacts.	No new impacts anticipated. Coordination with the county floodplain administrator would occur to determine whether minor encroachment of the floodplain would occur and whether a floodplain development permit is required.	No mitigation required.
Threatened and Endangered Species		No new impacts.	No effect.	No mitigation required.
Cultural Resources		No impact.	SHPO concurrence with finding of <i>No Effect</i> or <i>No Adverse Effect</i> to all historic properties.	No further avoidance/mitigation measures required.
Section 4(f) Properties	Historic Properties	No impact.	<i>De Minimis</i> Section 4(f) impacts to four historic resources; no additional Section 4(f) use.	No further avoidance/mitigation measures required. See Appendix G, Section 4(f) De Minimis Evaluations.
	Historic Irrigation Ditches	No impact.	<i>De Minimis</i> Section 4(f) impacts to ten historic irrigation ditches; no additional Section 4(f) use.	
	Recreation Areas	No impact.	No impact.	
Section 6(f) Properties		No impact.	No Section 6(f) properties would be converted to a transportation use. Directional and entrance signs that may be removed would be reinstalled following construction. If impacted, the entrance road for the Water Birch fishing access site would be returned to existing or improved condition following construction.	No mitigation required.
Hazardous Materials, Solid Waste, and Underground Storage Tanks		No impact.	No impacts anticipated.	If hazardous materials are discovered, generated, or used they would be stored, handled, and disposed of in accordance with applicable local, State, and Federal laws.
Visual/Aesthetic Considerations		No impact.	Improved aesthetics in Red Lodge; four roundabouts as desired in Resolution No. 3228; incorporation of elements of the Red Lodge Streetscape Plan.	No mitigation required.

Continued...

Table A
Summary Comparison of Project Alternatives and Impacts

Resource		Alternative A: No-Build	Alternative B: Preferred	Proposed Mitigation
Temporary Construction Considerations	Air Quality	No impact.	Temporary increase of fugitive dust and mobile source emissions.	Compliance with standard MDT procedures and applicable permit requirements.
	Transportation System	No impact.	Temporary impacts to local and regional traffic circulation in the project area due to lane closures, delays, temporary travel on unpaved surfaces, and reduced travel speeds.	Development of construction traffic control plan according to MDT Standard Specifications.
	Water Resources/Quality	No impact.	Short-term increase in turbidity, potential for erosion, and storm water runoff.	Use of BMPs; compliance with applicable federal and state regulations. Temporary impacts to wetlands would be restored to original contours and re-vegetated at the earliest practicable date following construction.
	Wildlife Habitat and Ecosystems	No impact.	May result in temporary minor disturbances to wildlife communities.	Between Sept. 1 and Apr. 30, vacated swallow or other songbird nests would be physically removed and deterrents would be placed on existing structures. Disturbed areas would be reseeded with desirable seed mix.
	Noise	No impact.	Temporary increase in noise levels within the vicinity of the project.	Compliance with MDT Standard Specifications. As necessary, the contract will include additional requirements for projects located in or near urban areas.

Continued...

Table A
Summary Comparison of Project Alternatives and Impacts

Resource	Alternative A: No-Build	Alternative B: Preferred	Proposed Mitigation
Utilities	No impact.	Some relocation of overhead and underground power lines and underground telephone lines may be required.	Potential impacts would be coordinated with the appropriate utility companies. Rural overhead power lines that are relocated would be raptor proofed per MDT policy.

V. PERMITS AND AUTHORIZATIONS

The following permits and authorizations are likely to be required prior to construction activities:

- CWA (Clean Water Act) Section 402/MPDES (Montana Pollutant Discharge Elimination System) authorization from MDEQ (Montana Department of Environmental Quality) Permitting and Compliance Division. The MPDES permit requires a storm water pollution prevention plan that includes a temporary erosion and sediment control plan. The erosion and sediment control plan identifies BMPs, as well as site-specific measures to minimize erosion and prevent eroded sediment from leaving the work zone.
- CWA Section 404 permit from the USACE (United States Army Corps of Engineers) for any activities that may result in the discharge or placement of dredged or fill materials in waters of the US, including wetlands.
- Montana Stream Protection Act (SPA 124) from the MT FWP (Montana Fish, Wildlife & Parks)-Fisheries Division. The Montana SPA 124 is required for projects that may affect the bed or banks of any stream in Montana.
- Short-Term Water Quality Standard for Turbidity related to construction activity (318 Authorization) from the MDEQ-Water Quality Bureau for any activities that may cause unavoidable violations of state surface water quality standards for turbidity, total dissolved solids, or temperature.
- Floodplain Development Permit from the County Floodplain Administrator.

VI. COORDINATION

The following discussion briefly details coordination efforts made with cooperating agencies, other interested parties, and the public. Coordination efforts are detailed further in Chapter 5 of this document.

i. Cooperating Agencies

The City of Red Lodge and Carbon County are both cooperating agencies for this project. MDT has coordinated with Red Lodge and Carbon County throughout the development of the project.

Meetings with the City of Red Lodge

- March 28, 2003 – Alignment and Grade review consisting of an overall project review.
- February 25, 2005 – Preliminary design concepts discussion; City Administrator express interest in roundabout concept at MT Highway 78 intersection.
- June 28, 2006 – Updated the City Council on alternatives under consideration in Red Lodge.
- August 10, 2006 – Meeting with Red Lodge City Planner and Red Lodge Public Works Director to discuss Oakes Avenue, access management, and land use development.
- February 27, 2007 – Presentation of the Access Management Plan to the City Council requesting approval of said plan.
- June 27, 2008 – Meeting with the City of Red Lodge to discuss the City's comments on the Administrative Draft EA.

Red Lodge Resolutions

- October 10, 2006 – City of Red Lodge passed Resolution No. 3223 which identified support for the preferred alternative within Red Lodge, with the exception of a TWLTL

between the developed limits of Red Lodge and Two Mile Bridge Road. See *Appendix A, Cooperating Agencies*.

- March 27, 2007 – City of Red Lodge passed Resolution No. 3228 which identified support for the preferred alternative within Red Lodge. See *Appendix A, Cooperating Agencies*.

Meetings with Carbon County

- March 1, 2007 – Informational meeting held to talk about proposed improvements in Boyd.
- March 29, 2007 – Follow-up to the March 1 meeting is held to further discuss the Dakota Avenue intersection in Boyd.

ii. Coordination with Other Agencies, Organizations, and Interested Parties

A scoping package was distributed to federal, state, and local agencies and other interested parties in March 2002. Due to modifications in the proposed project and the passage of time, agencies and interested parties were solicited again in May 2007. A total of 25 agency comments were received regarding the proposed project. These comments provided valuable information used to identify potential environmental impacts.

iii. Coordination with the Public

- March 27, 2002 – Kickoff Meeting held to inform elected officials and local, State, Federal, and regional agencies, as well as the public, of the project and to obtain local knowledge of concerns related to the proposed study. This meeting also served as an early notification of the preparation of an EA.
- November 6, 2002 – Alternatives Public Workshop held to inform the public of alternatives being considered for the project and to obtain public input.
- May 16, 2006 – Public informational meeting held to discuss improvements to highway-related storm water drainage along the project corridor in Roberts.
- November 14, 2006 – A property owner meeting was held to discuss current and future access needs from MT Highway 78 to Two Mile Bridge Road.
- January 17, 2007 – A second access management meeting was held to present potential alternatives for access management along MT Highway 78 to Two Mile Bridge Road and to solicit public feedback.
- January 31, 2007 – A meeting was held with the architect working with the City of Red Lodge on the new Bank of Red Lodge. The purpose of the meeting was to discuss when the US Highway 212 project would be constructed, the amount of right-of-way required for the proposed project, and possible layouts for the bank site plan.
- February 16, 2007 – A meeting was held with the owners and representatives of the proposed Beartooth Hospital in an effort to coordinate the proposed US Highway 212 project and right-of-way requirements with the future site plan of the Beartooth Hospital.
- December 18, 2007 – A public informational meeting was held to discuss improvements to highway-related storm water drainage along the project corridor in Roberts.

iv. Public Hearing

Two Public Hearings are planned for this project, one in Red Lodge and the other in Roberts. A Notice of Availability of the EA and Public Hearing dates will be advertised following the approval of this document.

v. Conclusion

There are no areas of controversy, substantive issues raised, or issues remaining to be resolved that resulted from coordination with cooperating agencies, other interested parties, and the public.

Chapter 1 Purpose of and Need for Action

1.1 INTRODUCTION

The MDT (Montana Department of Transportation) plans to reconstruct approximately 21.2 miles (34.1 kilometers) of US Highway 212 in Carbon County. The proposed project begins at 8th Street in Red Lodge and continues generally north-northeast to approximately 1,000 feet (305 meters) north of Boyd.

The south logical terminus in Red Lodge was originally the intersection of MT Highway 78 (3rd Street). However, transitions of intersection and highway improvements would place the end of construction one to two blocks beyond the intersection of MT Highway 78, and so the southern terminus was extended to 5th Street. Following the initial public input meeting, the City of Red Lodge requested MDT extend the project terminus to 8th Street, where there is an abrupt change in the roadside design and character, from urban fringe development without sidewalks and continuous curb and gutter, to downtown commercial development with full sidewalks and curb and gutter. Ending the highway improvements three blocks north of 8th Street (5th Street) would leave a short stretch of US Highway 212 without pedestrian and drainage improvements; therefore the logical terminus was extended to 8th Street. It is anticipated that improvements at the 8th Street intersection would have minimal transition beyond the intersection.

The north logical terminus at Boyd was selected to tie into and match an existing section of US Highway 212, which has widened shoulders, and avoid leaving a narrow section of roadway for a future project.

The existing facility is a rural two-lane roadway with 12-foot (3.6-meter) driving lanes and approximately 2-foot (0.6-meter) shoulders. The proposed project corridor extends through a portion of the city of Red Lodge and through the three unincorporated communities of Fox, Roberts, and Boyd. The urban portion of the proposed project is through Red Lodge, with variable roadway widths and no turning lanes. Within the corridor, there are no signalized intersections and traffic control typically consists of two-way stop control on intersecting roads. *See Figure 1-1, Project Location Map.*

US Highway 212, in the project area, is functionally classified as a rural minor arterial and is on Montana's Primary Highway System. It serves local, commuter, tourist and agricultural traffic and is considered an integral part of the regional transportation network. The corridor provides transportation for a variety of users, from wide agricultural vehicles to bicyclists and pedestrians who frequent the area between 8th Street and Two Mile Bridge Road in Red Lodge. The highway is a major travel route used by residents commuting between Red Lodge and Laurel or Billings. It also serves tourist traffic as a through route to Yellowstone National Park, the Beartooth Highway, Red Lodge Mountain Ski Area, and other recreational areas. In addition, US Highway 212 connects a number of local roads to the regional transportation network.

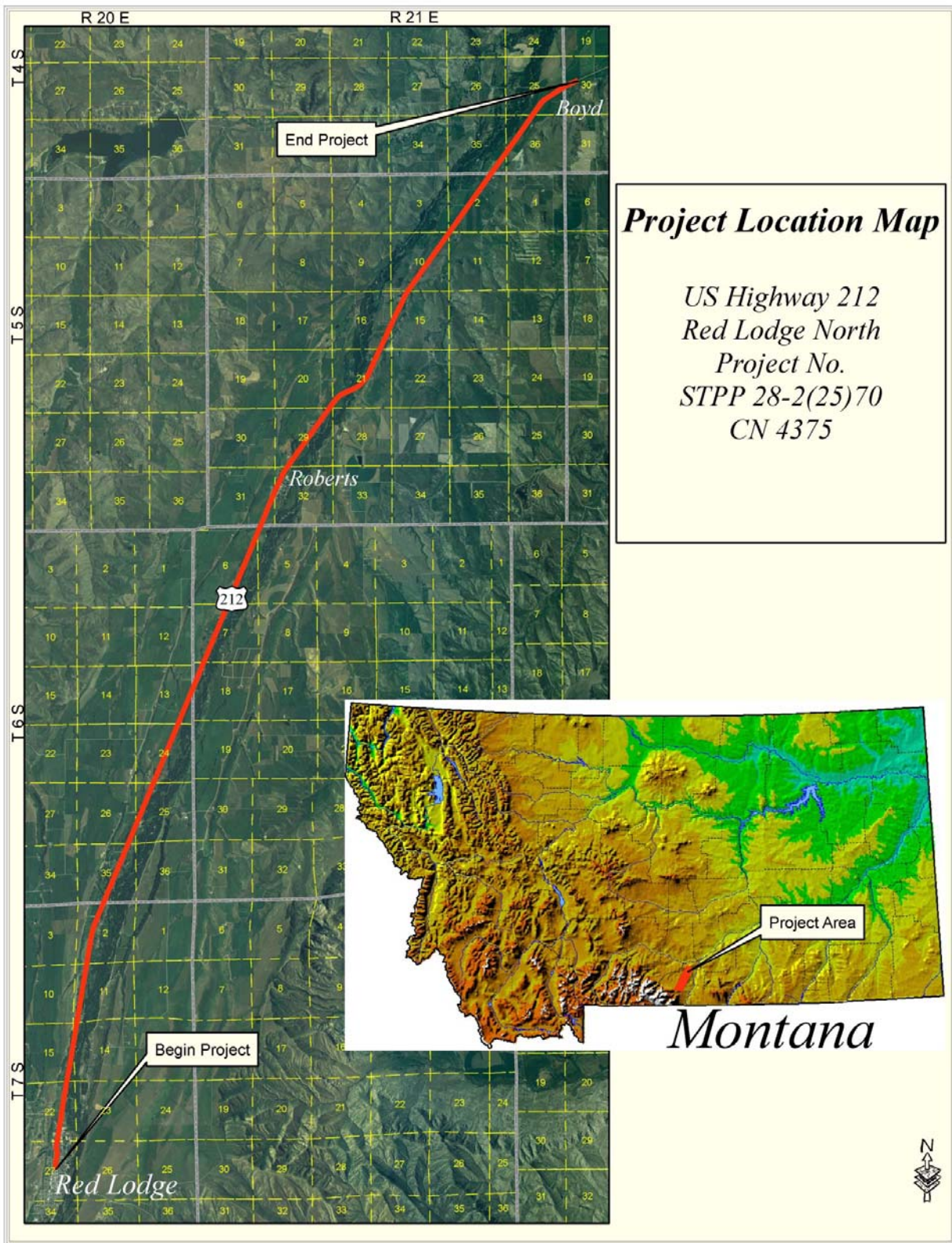


Figure 1-1, Project Location Map

The proposed reconstruction of US Highway 212 is being administered by the MDT under a project designated as Corridor Study-Red Lodge North (Project Number STPP 28-2(25)70, Control Number 4375). MDT estimates \$21.3 million will be available for projects on this corridor from the SAFETEA-LU Section 1934 Transportation Improvement Project #246 to Develop and Construct US 212 Red Lodge North. At this time, the top priorities are the city of Red Lodge and the community of Roberts. The other segments (between Red Lodge and Roberts as well as Roberts and Boyd) of the project would be constructed as funding becomes available.

1.2 PURPOSE AND NEED FOR THE PROJECT

The purpose of the proposed project is to improve the safety and operational characteristics of the roadway.

The proposed project is needed because there are numerous roadway deficiencies along the corridor which create safety and operational concerns. These include aging pavement; intersection deficiencies; a need for access management, particularly in Red Lodge; a lack of pedestrian and bicycle facilities in Red Lodge; a need for improved LOS (level of service) in rural segments and at two intersections in Red Lodge; and narrow roadway shoulders and steep ditch slopes in rural segments. This corridor also has a higher than statewide average crash history.

Additionally, the City of Red Lodge is experiencing continued population growth and development pressure. This project stems in part from a request by the City to work cooperatively to plan for and accommodate future development in Red Lodge along the US Highway 212 project corridor.

Furthermore, the community of Roberts has voiced concerns of storm water drainage problems along US Highway 212. These concerns surfaced following the May 2005 flooding in Carbon County and have been perpetuated as a result of additional flooding in June 2007. The proposed project would help address these concerns by improving highway-related storm water drainage near Roberts.

1.2.1 Need to Improve Safety and Operational Characteristics of the Roadway

US Highway 212 within the project corridor was originally constructed in 1921. Since that time numerous improvements have been completed, the most recent being the Red Lodge North project, administered under Project Number STPP 28-2(22)70, which was completed in June 2002 and included pavement preservation construction and replacement of the Rock Creek Bridge north of Roberts. The roadway has numerous deficiencies, which are described below.

Pavement

The pavement on US Highway 212 is nearing the end of its serviceability, and a stronger pavement section is required to serve the next 20 years. The pavement was overlaid in 1984–85. A typical design life for asphalt pavement is approximately 20 years. The Red Lodge North project completed in 2002 included a mill and overlay from the north end of this project south for 2 miles (3.2 kilometers), replacement of the Rock Creek Bridge north of Roberts as well as new bridge approach sections for 1/8-mile (0.2 kilometers) north and south of the bridge, and a seal coat on the remaining 19 miles (30.6 kilometers) of the project corridor. Nineteen of the 21 miles (30.6 of the 33.8 kilometers) have exceeded the design life for asphalt pavement.

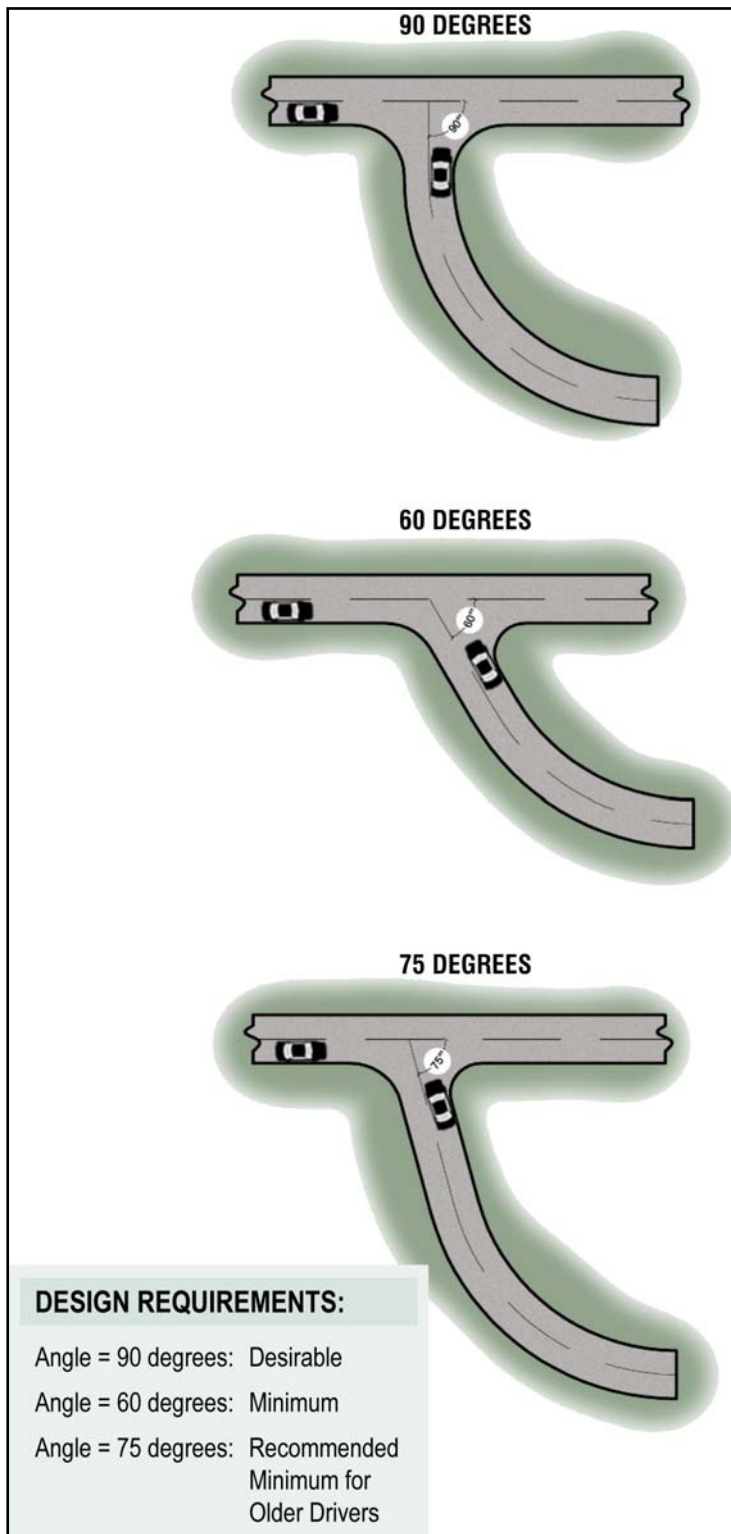


Figure 1-2, Conceptual Intersection Angles

Intersections

Numerous intersections along the project corridor have geometric deficiencies, meaning that they are either skewed or offset.

A skewed intersection is one that has an angle of less than 60 degrees. Generally, intersecting roads should meet at right angles (90 degrees) wherever practical and should not intersect at an angle less than 60 degrees. A skew of no less than 75 degrees is preferable to accommodate older drivers. Skewed intersections need extensive turning roadway areas and tend to limit motorist visibility of other vehicles, particularly for drivers of trucks. Skewed intersections also increase the exposure time for vehicles crossing the main traffic flow. See *Figure 1-2, Conceptual Intersection Angles*.

An offset intersection is one where two opposing streets are not directly lined up with each other. Closely spaced offset intersections are undesirable. Offset intersections in close proximity to each other create additional motor vehicle conflict points for a motorist to consider while executing a crossing or merge maneuver; this may create greater potential for collisions. Offset intersections can also increase the potential for collisions for two opposing vehicles that simultaneously attempt a left turn. See *Figure 1-3, Conceptual Offset Intersection Overview*.

In addition, two intersections within Red Lodge do not have adequate capacity to accommodate anticipated future traffic volumes.

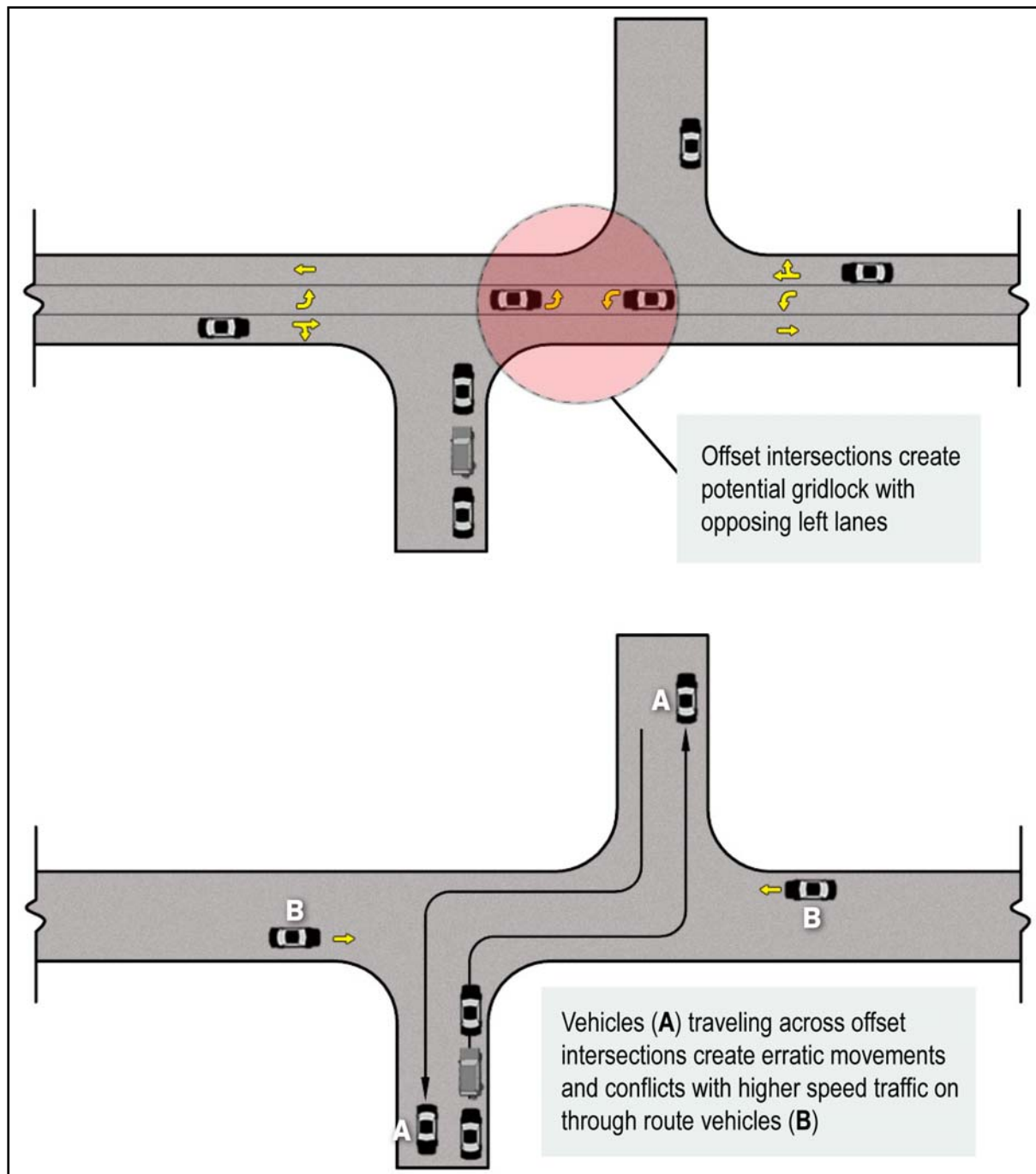


Figure 1-3, Conceptual Offset Intersection Overview

Access

US Highway 212 accommodates both through traffic and local traffic; therefore, it is important to provide for progression as well as access to adjacent properties. Overall operation of rural minor arterials (such as the project corridor) is not typically governed by capacity or intersection operations; such roadways usually provide free flow under all conditions. However, the conditions along the project corridor, particularly in northern Red Lodge, are continually changing due to population growth and development. The City of Red Lodge identified the need for an access management plan for US Highway 212, between MT Highway 78 and Two Mile Bridge Road, to provide a balance between the need for progression of through traffic and the need to access existing and planned developments adjacent to the corridor.

Pedestrian/Bicycle Facilities

There are discontinuous sidewalks and no bicyclist accommodations along the project corridor. The City of Red Lodge prepared a trails plan in 2006¹, which outlined an improved system of trails for non-motorized transportation in and around the City. The plan also identified the need for sidewalk and shared bike/ped path facilities along US Highway 212 within Red Lodge.

Level of Service

A traffic operations analysis was conducted for the project corridor to determine the LOS for the project segments and key intersections. Based on increased traffic, the analysis identified that the existing two-lane roadway does not provide an adequate LOS along the rural segments. As mentioned previously, two intersections in Red Lodge would also provide inadequate LOS by the project design year. Adequate LOS for rural segments would be LOS B, while urban segments would be LOS C.

Shoulders

US Highway 212 is a rural two-lane roadway that has 12-foot (3.6-meter) driving lanes and approximately 2-foot (0.6-meter) shoulders, with a total roadway width of 28 feet (8.4 meters); immediately north of the project limits the shoulders widen to 8 feet (2.4 meters). Comments received throughout the public input process indicated support for wider shoulders. Wider shoulders are more desirable because they provide recovery room for errant vehicles, space for emergency parking outside the travel lanes, and more comfortably accommodate large agricultural equipment.

What is LOS (Level of Service)?

The ability of a transportation facility to operate safely and efficiently is a function of the available capacity and the projected travel demand. LOS is a concept in which a letter grade is assigned to a facility as a gauge of the vehicular delay and ability to travel unimpeded. A summary of the LOS letter grades is shown below.

- A** = Excellent (Free Flow)
- B** = Good (Reasonable Flow)
- C** = Average (Stable Flow)
- D** = Poor (Approaching Unstable Flow)
- E** = Impaired (Unstable Flow)
- F** = Unacceptable (Gridlock)

¹ Beck, Barb, Tom Kohley, and Allie Wood, *The City of Red Lodge Comprehensive Trails Plan* (May 2006).

Ditch Slopes

Many of the roadside ditches along the project corridor have steep slopes. A 3:1 or steeper inslope (the ditch slope closest to the roadway) is considered a “non-traversable” slope in that an errant vehicle could roll over if the driver attempted to turn back onto the roadway. A flatter inslope, such as a 6:1 inslope, is considered more desirable for a roadway such as US Highway 212 in that an errant vehicle has a greater chance of recovery. Where practicable, 6:1 slopes would be used. See *Figure 1-4, Conceptual Ditch Inslope Illustration*.

What does 3:1 mean?

Ditch slopes are measured using a ratio of horizontal distance compared to vertical distance. For example, a 3:1 ratio indicates that there are three feet of horizontal distance for every one-foot of vertical distance. As the first number gets larger (the horizontal distance increases), the slope becomes flatter and more recoverable.

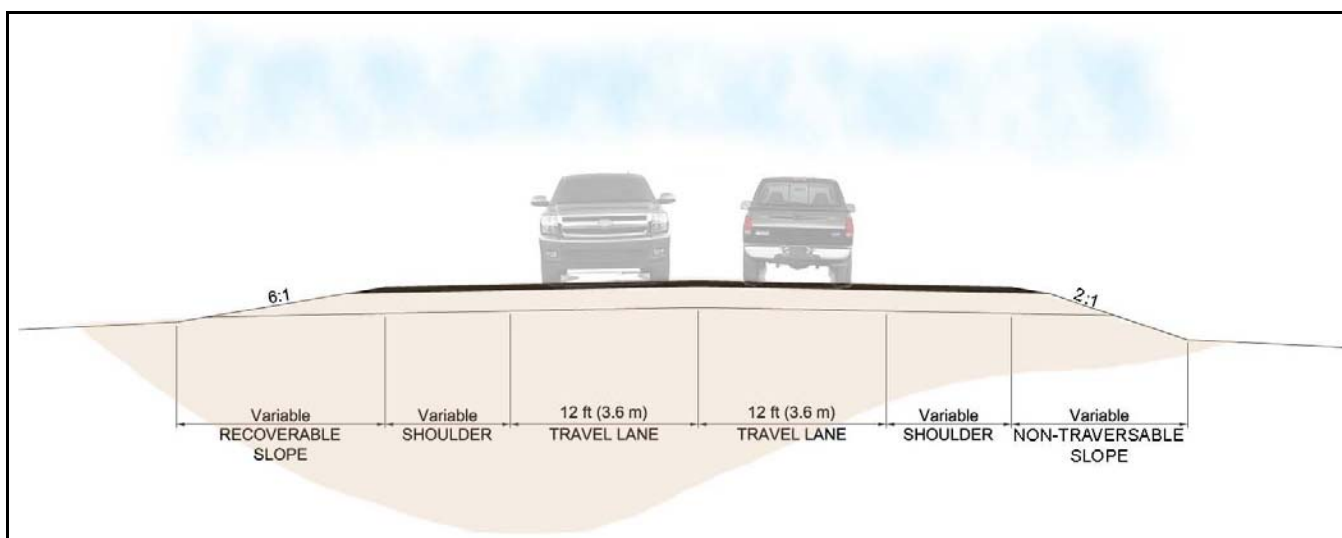


Figure 1-4, Conceptual Ditch Inslope Illustration

Clear Zones

The clear zone is an area adjacent to the roadway that is kept free of obstacles to prevent impact by an errant vehicle. Examples of obstacles or encroachments that compromise the clear zone are large culverts, trees, non-approved mailboxes and signs, utility poles, steep side-slopes on approaches, irrigation facilities and streams. All of these encroachments are present to varying degrees on US Highway 212. The width of the clear zone is measured from the outside edge of the driving lane and varies with traffic volume, design speed and the slope off of the roadway. Therefore, clear zone width requirements vary along the project corridor. See *Figure 1-5, Conceptual Clear Zone Illustration*.

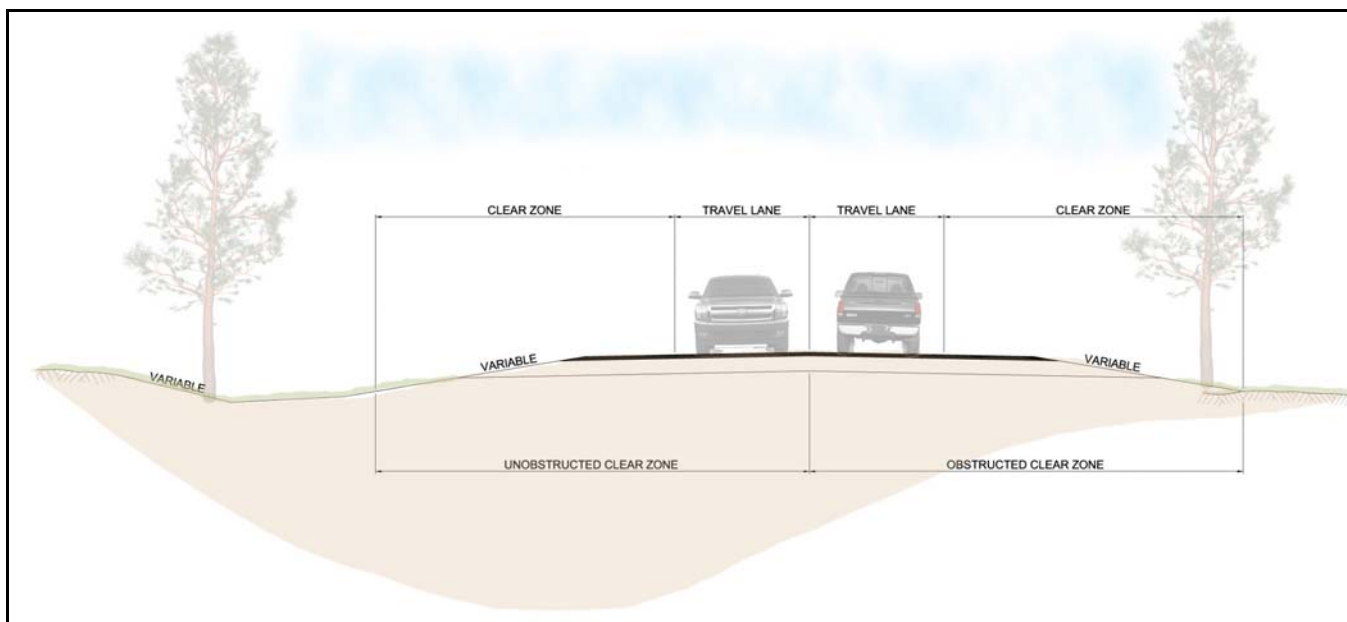


Figure 1-5, Conceptual Clear Zone Illustration

Crash Rate

A crash analysis for this project was performed for the dates January 1, 1992 through December 31, 2001 and for the dates January 1, 1992 through December 31, 2006². See *Table 1.1, Collision Summary (1992–2006)*.

Crash Type	US 212 Study Area	Statewide Rural Primary Average
Clear Conditions	65%	55%
Nighttime (dark conditions)	42%	31%
Wildlife Related	37%	14%

There were 10 fatal crashes during the 15-year analysis period (1992–2006), all at different locations. Seven crash cluster locations were identified along the project corridor. The crash analysis indicated contributing factors to traffic crashes along the corridor, as described below.

- *Snow/ice build-up on roadway* - many of the roadside ditches along the project corridor are narrow and shallow, and they annually become filled with snow. This contributes to the formation of compacted snow and ice on the highway. Inclement weather, including icy or slushy road conditions, was identified as a contributing factor in nearly 10 percent of the total recorded crashes.
- *High frequency of animal-vehicle collisions* - Animal-vehicle collisions within the project corridor are close to three times the statewide average and comprise over 54

² Information and analysis are as reported in an April 15, 2002 memorandum, May 24, 2002 memorandum, and July 27, 2007 engineering study evaluation.

percent of the nighttime collisions. The combination of thick brush and trees within the clear zone and narrow roadside ditches with steep inslopes obscures driver visibility of approaching animals and contributes to animal-vehicle collisions.

- *Differential speed conflicts*³ - There are a large number of turning vehicles in the segments through Red Lodge and Roberts, which presents differential speed conflicts with through traffic and slower turning traffic.

1.2.2 Supporting Element

Public concerns have been raised throughout the project planning process regarding highway-related storm water drainage in Red Lodge and Roberts. Public concerns in Roberts were exacerbated due to flooding occurring in May 2005 and June 2007. As a result, improving highway-related storm water drainage through Red Lodge and Roberts has been identified as a supporting element of this project.

1.3 PROJECT OBJECTIVES

The overall project objective is to improve safety and operational characteristics of the roadway by improving roadway deficiencies to meet MDT and AASHTO (American Association of State Highway and Transportation Officials) standards to greatest extent practicable. Listed below are specific project objectives.

Improve the Safety and Operational Characteristics of the Roadway

- Improve pavement condition along project corridor.
- Improve intersection geometry at key locations.
- Improve access in north Red Lodge.
- Accommodate pedestrian/bicycle users in Red Lodge.
- Improve LOS in rural segments and at two intersections in Red Lodge.
- Provide wider shoulders in rural segments.
- Flatten ditch inslopes in rural segments.
- Reduce encroachments within clear zones where appropriate.
- Increase ditch storage for snow/ice off the roadway in rural segments.
- Reduce frequency of animal-vehicle collisions along project corridor.
- Reduce differential speed conflicts with turning vehicles in Red Lodge and Roberts.

Supporting Element

- Improve highway-related drainage through Red Lodge and Roberts

³ A "differential speed conflict" is when a vehicle is slowing down, or moving slower, than a vehicle behind them. If the faster vehicle doesn't notice that the car in front is moving slower or slowing down, there could be a rear end accident.

1.4 HISTORY OF THE PLANNING & SCOPING PROCESS

The proposed project is the result of a cooperative planning effort by the FHWA (Federal Highway Administration), MDT, the City of Red Lodge, and Carbon County. Coordination with the City of Red Lodge and the Carbon County Commissioners has been ongoing. Numerous meetings have been held with the City of Red Lodge to discuss the proposed project, including typical section, pedestrian and bicycle facilities, parking, intersection concerns, and access management. In addition, two meetings were held with the Carbon County Commissioners to discuss improvements through the community of Boyd⁴.

In addition to cooperating agencies, an effort was made to solicit views from agencies and other interested parties to ensure that social, economic, and environmental impacts were considered in the development of the EA. Scoping packages were sent in March 2002 and May 2007 to numerous local, State, and Federal agencies to determine the consistency of the project with current and proposed plans, programs, and policies. These coordination efforts have occurred throughout the development of the EA via consultation with agencies having jurisdiction over potentially impacted resources.

Further, throughout the development of this project, efforts were also made to reach out to the public and incorporate public input into plans to improve the highway. Five public meetings were held to discuss items such as the purpose and need of the proposed project; proposed improvement alternatives; storm drainage issues in the community of Roberts; and access management within Red Lodge. In addition, coordination meetings were held with representatives of the proposed Bank of Red Lodge and the proposed Beartooth Hospital in Red Lodge, both of which are planned adjacent to the project corridor.

1.5 RELEVANT PLANS

Both the City of Red Lodge and Carbon County have developed Growth Policies, which are intended to guide development, growth patterns, and land use decisions in the area. The Red Lodge Growth Policy was adopted in May 2001. The Carbon County Growth Policy was adopted in September 2003.

Using the Red Lodge Growth Policy as guidance, the City of Red Lodge adopted the City of Red Lodge Comprehensive Trails Plan in May 2006. This Plan was adopted to satisfy one of the goals of the Growth Policy, which was to develop a trail system linking parks, residential areas, and open space areas. Recommendations for pedestrian and bicycle accommodations along US Highway 212 in Red Lodge have been incorporated into the proposed project where practicable and appropriate.

⁴ Additional information about the coordination process can be found in Chapter 6 of this document.

Chapter 2 Alternatives

2.1 INTRODUCTION

This chapter provides information on the development and evaluation of project alternatives. Following the identification of the purpose and need for the proposed project and the project objectives, numerous improvement scenarios were developed and evaluated. These scenarios were modified and refined based on input from elected officials and the general public as well as data collected pertaining to engineering factors, environmental considerations, and existing and planned development along the corridor. The result of this process is presented in this chapter. Two alternatives are under consideration for this project: a no-build alternative and a preferred alternative.

2.2 ALTERNATIVE A: NO-BUILD

Alternative A is the no-build alternative. A no-build alternative is included in this type of analysis to provide a baseline condition against which other alternatives are evaluated. The no-build alternative is used to describe the existing conditions and anticipate what would happen if no improvements were made. It is important for the public and the decision-makers to understand whether the specific problems associated with the roadway are likely to improve on their own, remain stagnant, or worsen without specific actions to correct such problems.

Alternative A would leave the existing roadway in place as it exists today, with a continuation of current maintenance practices. This would not meet the project objectives. There would be no construction costs associated with Alternative A, aside from routine maintenance.

2.3 ALTERNATIVE B: PREFERRED ALTERNATIVE

Alternative B, hereafter referred to as the Preferred Alternative, would meet the project objectives outlined in the purpose and need chapter. The Preferred Alternative would:

- Improve the pavement condition along the project corridor by reconstructing the roadway.
- Improve the intersection geometry at key locations along the corridor.
- Incorporate an Access Management Plan for Red Lodge, which was supported by the Red Lodge City Council in March 2007. *See Appendix A, Letter #8.*
- Provide pedestrian and bicycle facilities in Red Lodge.
- Improve LOS by providing passing lanes in rural segments where appropriate and making improvements at the 8th Street/US Highway 212 and MT Highway 78/US Highway 212 intersections.
- Provide wider roadway shoulders in rural segments where appropriate.
- Flatten ditch slopes in rural segments where appropriate.
- Reduce clear zone encroachments in rural segments where appropriate.
- Provide increased snow storage with wider and deeper roadside ditches.
- Clear thick brush and trees within the clear zone to improve driver visibility of approaching wildlife.
- Provide turning lanes where needed to reduce differential speed conflicts.
- Improve highway-related storm water drainage in Red Lodge and Roberts.

Because the project corridor is relatively long (approximately 21.2 miles [34.1 kilometers]), and the character and needs of the adjacent communities change along this length, the project corridor will be discussed as four segments: Red Lodge, Red Lodge to Roberts, Roberts, and Roberts to Boyd. *See Figure 2-1, Segment/Intersection Locations.* The Preferred Alternative would have an estimated construction cost of approximately \$44.0 million; of this, approximately \$40.0 million would be for construction of the project.

The following sections describe in more detail the proposed improvements associated with the Preferred Alternative for each of the four segments. In addition to the improvements proposed to meet the specific project objectives, other improvements may be included to bring the roadway to current standards and/or meet the needs of the adjacent communities. *See Table 2.1, Summary of Preferred Alternative.* It should be noted that the proposed improvements presented as the Preferred Alternative and associated impact estimates are based on the conceptual design (approximately 30 percent) that is available at this early stage of the design process. Some minor adjustments may be necessary as the design process continues to evolve.

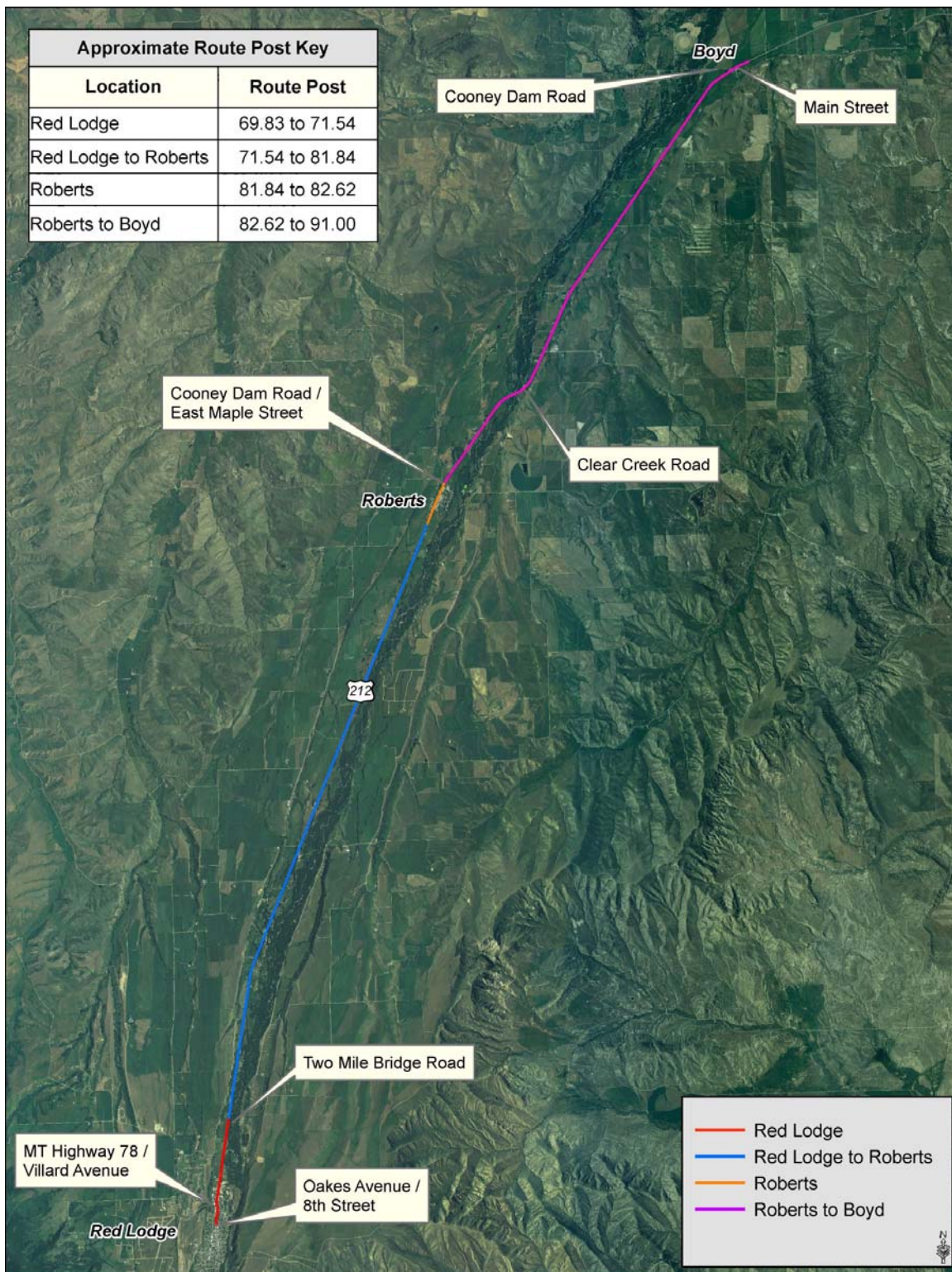


Figure 2-1, Segment/Intersection Locations

**Note: This is a conceptual figure based on the preliminary (approximately 30 percent) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization, and mitigation strategies are evaluated, potential impacts may change slightly.*

Table 2.1
Summary of Preferred Alternative

Segment	Sub-segment	Typical Section	Intersection(s)	Intersection(s) Improvements	Drainage
Red Lodge	8 th St to MT 78	<ul style="list-style-type: none"> • Two 12' travel lanes • Two 10' parking lanes • Two 5' sidewalks 	Oakes Avenue and 8 th Street	<ul style="list-style-type: none"> • Realign Oakes with 7th Street • Convert Oakes to southbound one-way • Provide diagonal parking on Oakes • Narrow the street width at Carnegie Library • Install traffic signal on 8th Street when warranted and justified 	<ul style="list-style-type: none"> • Curb and gutter • Storm water conveyance system
	MT 78 to Developed Limits of Red Lodge	<ul style="list-style-type: none"> • Two 12' travel lanes • Two 5.5' shoulders • One 14' TWLTL • One 5' sidewalk on west side of roadway • One 10' shared bike/ped path on east side of roadway 	MT 78 and Villard Avenue	<ul style="list-style-type: none"> • Construct roundabout • Close Villard and MT 78 intersection • Construct cul-de-sac on Villard south of MT 78 • Extend 4th Street 	
	Developed Limits of Red Lodge to Two Mile Bridge Road	<ul style="list-style-type: none"> • Two 12' travel lanes • One 13' raised median • Two 5.5' shoulders • Two 3.5' median shoulders • One 10' shared bike/ped path on east side of roadway 	Two Mile Bridge Road and four other locations	Per access management plan: <ul style="list-style-type: none"> • Construct roundabouts at full access intersections (3 intersections) • Construct $\frac{3}{4}$ access intersection • Construct $\frac{1}{2}$ access intersection 	<ul style="list-style-type: none"> • Roadside ditches
Red Lodge to Roberts	Two Mile Bridge Road to south end of Roberts	<ul style="list-style-type: none"> • Two 12' travel lanes • Two 8' shoulders • Bus turnaround • One-mile northbound passing lane 			<ul style="list-style-type: none"> • Maintain existing drainage patterns and culvert locations • May relocate irrigation ditches within right-of-way

Continued...

Table 2.1
Summary of Preferred Alternative

Segment	Sub-segment	Typical Section	Intersection(s)	Intersection(s) Improvements	Drainage
Roberts	South end of Roberts to East Maple Street	<ul style="list-style-type: none"> • Two 12' travel lanes • Two 4' shoulders • One 14' TWLTL 	Oak, Cedar, Pine, and East Maple Streets	<ul style="list-style-type: none"> • Construct crosswalk at each intersection 	<ul style="list-style-type: none"> • Construct berms perpendicular to highway to direct storm water • Replace existing culvert south of Birch Street • Direct storm water within Roberts to open ditches and/or pipes
	East Maple Street to north end of Roberts	<ul style="list-style-type: none"> • Two 12' travel lanes • Two 4' shoulders • One 14' TWLTL • 2:1 inslope with guardrail on east 	Cooney Dam Road	<ul style="list-style-type: none"> • Realign to form a single intersection perpendicular to US Highway 212 	
Roberts to Boyd	North end of Roberts to Boyd	<ul style="list-style-type: none"> • Two 12' travel lanes • Two 8' shoulders • Bus turnaround • One-mile northbound passing lane • One-mile southbound passing lane 	Clear Creek Road	<ul style="list-style-type: none"> • Realign with south access of rest area 	<ul style="list-style-type: none"> • Maintain existing drainage patterns and culvert locations • May relocate irrigation ditches within right-of-way
			Cooney Dam Road	<ul style="list-style-type: none"> • Close northern fork • Add southbound right-turn lane on US Highway 212 to Cooney Dam Road 	
	Boyd Country Store	<ul style="list-style-type: none"> • Two 12' travel lanes • Two 8' shoulders • One southbound 12' left-turn lane • Reverse curb along store parking lot 	Main Street	<ul style="list-style-type: none"> • Realign to be perpendicular to US Highway 212 • Addition of southbound left-turn lane on US Highway 212 	

2.3.1 RED LODGE (8TH STREET TO TWO MILE BRIDGE ROAD)

The Preferred Alternative includes the following improvements for Red Lodge:

- Three distinct typical sections to accommodate user needs while minimizing impacts to adjacent properties
 - 8th Street to MT Highway 78 (See page 2-8)
 - MT Highway 78 to developed limits of Red Lodge (See page 2-9)
 - Developed limits of Red Lodge to Two Mile Bridge Road (See page 2-10)
- Drainage improvements (See page 2-12)
- Intersection improvements at the following locations:
 - Oakes Avenue and 8th Street (See page 2-12)
 - MT Highway 78 and Villard Avenue (See page 2-14)
- Access management plan (See page 2-14)
 - Roundabouts at Two Mile Bridge and two other locations
 - One three-quarter access intersection
 - One half-access intersection
- Crosswalks would be provided, where appropriate, as determined during final design and in coordination with the City of Red Lodge.

The City of Red Lodge supported the Preferred Alternative as described below for the Red Lodge project segment in Resolution No. 3223, dated October 10, 2006, and Resolution No. 3228, dated March 27, 2007. *See Appendix A, Cooperating Agencies.*

2.3.1.1 Typical Sections

The project corridor in Red Lodge consists of three distinct sub-segments. South of MT Highway 78, the corridor is within a mixed use, downtown area with urban residential and commercial use. North of MT Highway 78, the corridor is adjacent to a developed area with mixed use that is predominantly commercial and suburban residential in nature and an undeveloped/developing area. The need for items such as parking lanes, pedestrian and bicycle facilities, turning lanes, and drainage improvements varies along each sub-segment, as does the proximity of adjacent development, which to some extent determines the available space for roadway improvements. Therefore, a different typical section has been proposed for each sub-segment within Red Lodge. *See Figure 2-2, Red Lodge Typical Section Locations.*

Additionally, Red Lodge has prepared a streetscape plan for US Highway 212 south of 8th Street. MDT will work with the City of Red Lodge to develop an agreement to address appropriate lighting and landscaping features to be incorporated into this proposed project. The Red Lodge Streetscape Plan, available funding, and maintenance responsibilities will be taken into consideration when developing the agreement.

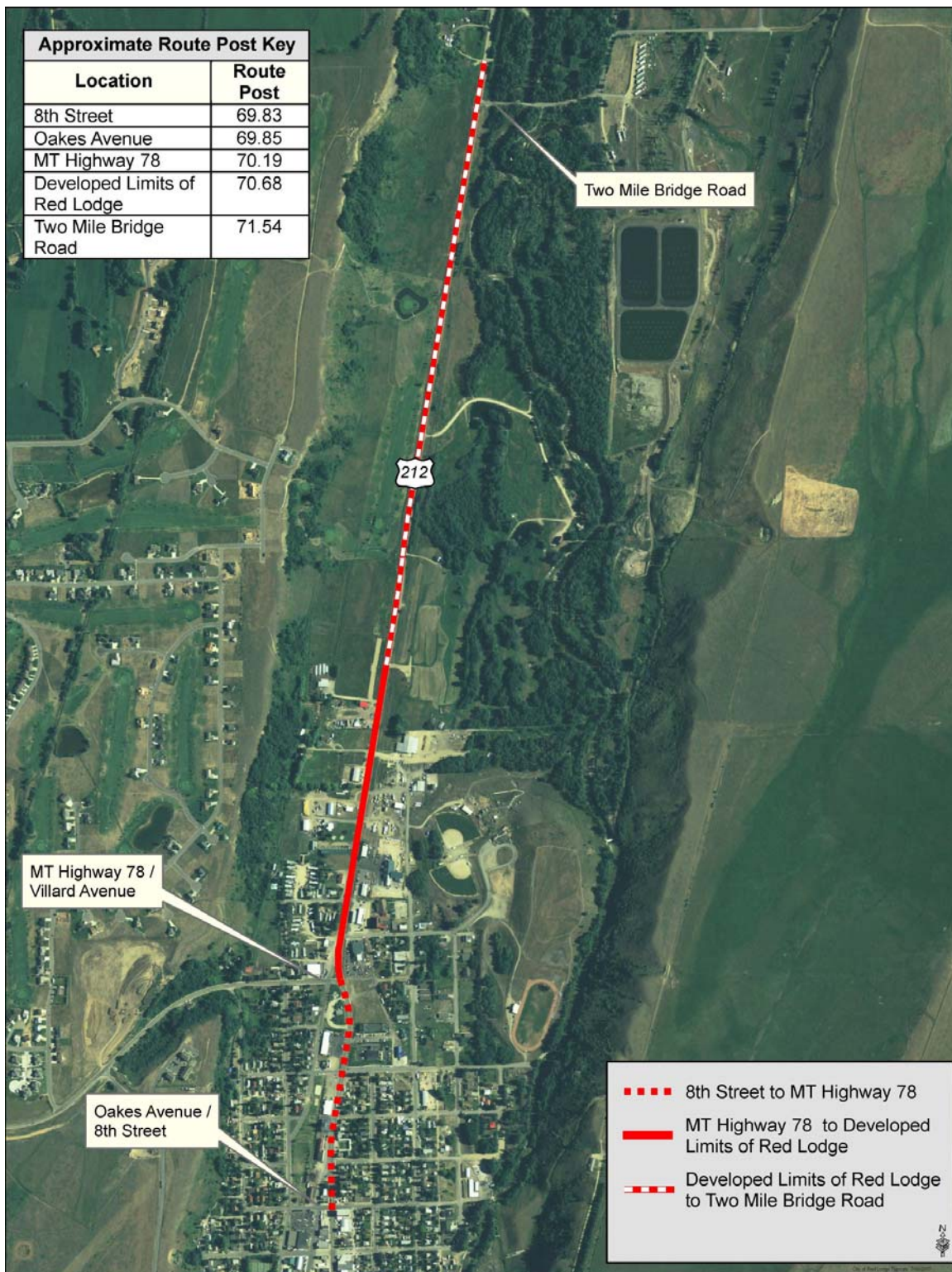


Figure 2-2, Red Lodge Typical Section Locations

**Note: This is a conceptual figure based on the preliminary (approximately 30 percent) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization, and mitigation strategies are evaluated, potential impacts may change slightly.*

8th Street to MT Highway 78

The proposed improvement from 8th Street to MT Highway 78, in Red Lodge, includes a 44-foot (13.2-meter) curb-to-curb urban typical section consisting of:

- Two 12-foot (3.6-meter) travel lanes
- Two 10-foot (3.0-meter) parking lanes
- Two 5-foot (1.5-meter) sidewalks

See Figure 2-3, 8th Street to MT Highway 78.

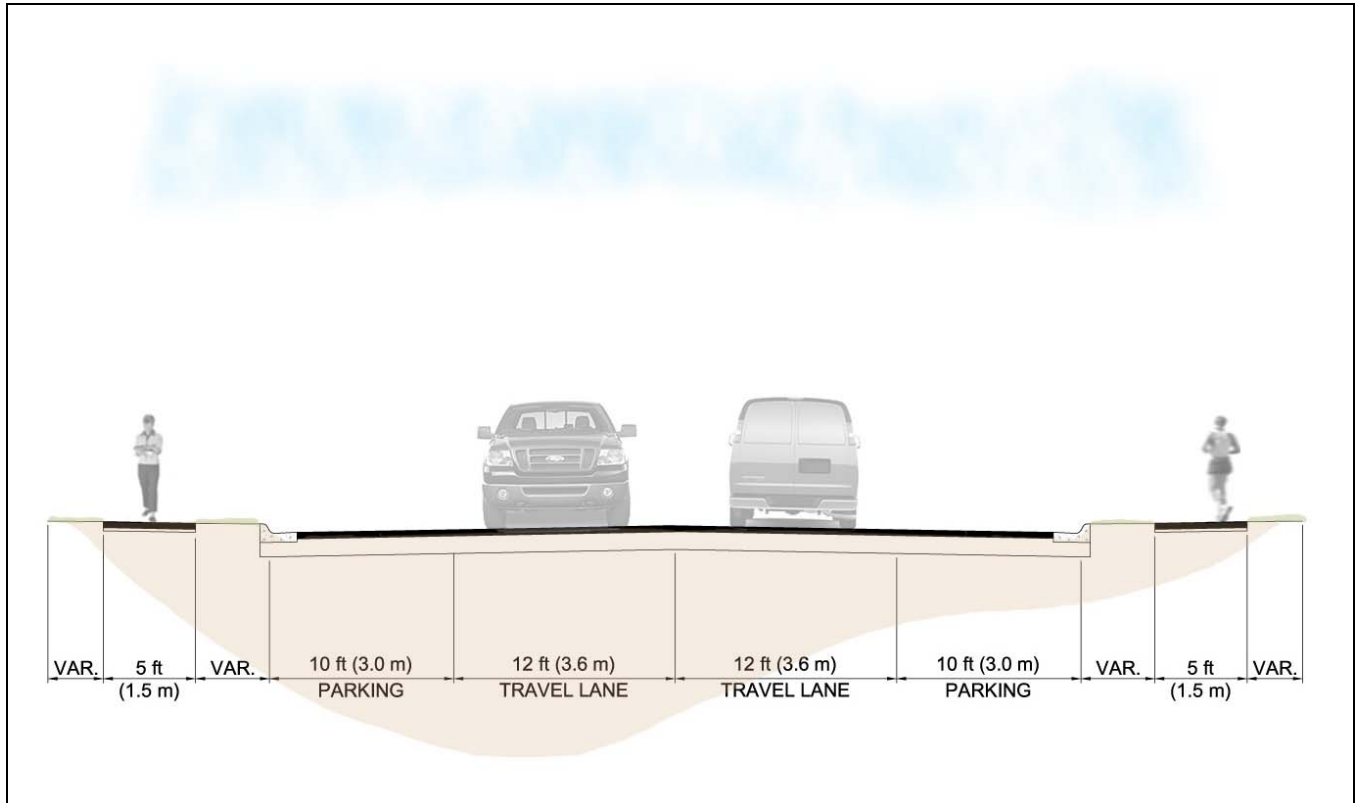


Figure 2-3, 8th Street to MT Highway 78

**Note: This is a conceptual figure based on the preliminary (approximately 30 percent) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization, and mitigation strategies are evaluated, potential impacts may change slightly.*

MT Highway 78 to Developed Limits of Red Lodge

The proposed improvement from MT Highway 78 to the developed limits of Red Lodge includes a 49-foot (14.9-meter) curb-to-curb urban typical section with:

- Two 12-foot (3.6-meter) travel lanes
- Two 5.5-foot (1.7-meter) shoulders
- One 14-foot (4.2-meter) TWLTL (two-way left-turn lane)¹. See Figure 2-4.
- One 5-foot (1.5-meter) sidewalk on the west side of the roadway
- One 10-foot (3.0-meter) shared bike/ped path on the east side of the roadway

What is a TWLTL ("Twittle")?

A TWLTL is a turn lane in the middle of a road that is used for left turning vehicles from either direction. The benefit of a TWLTL is that a motorist wishing to turn left can do so while waiting in the turn lane, out of the way of vehicles approaching from behind. Rear end accidents can be reduced by using TWLTLs in areas with frequent driveways or intersections along the road.

See Figure 2-5, MT Highway 78 to Developed Limits of Red Lodge.

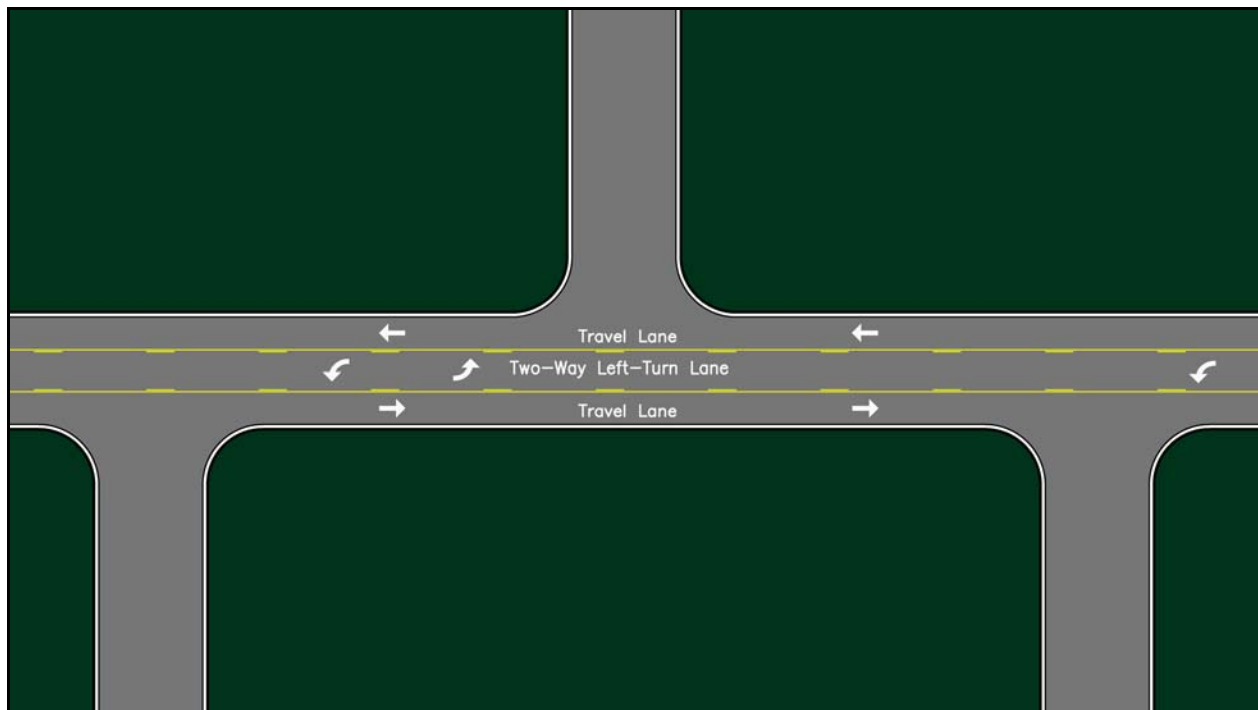


Figure 2-4, TWLTL (Two-Way Left-Turn Lane) Example

¹ MDT's standard width for a TWLTL is 14 feet (4.2 meters). The TWLTL at this location may be reduced to a 12-foot (3.6-meter) TWLTL in order to reduce right-of-way impacts. This would be determined during the design phase of the proposed project.

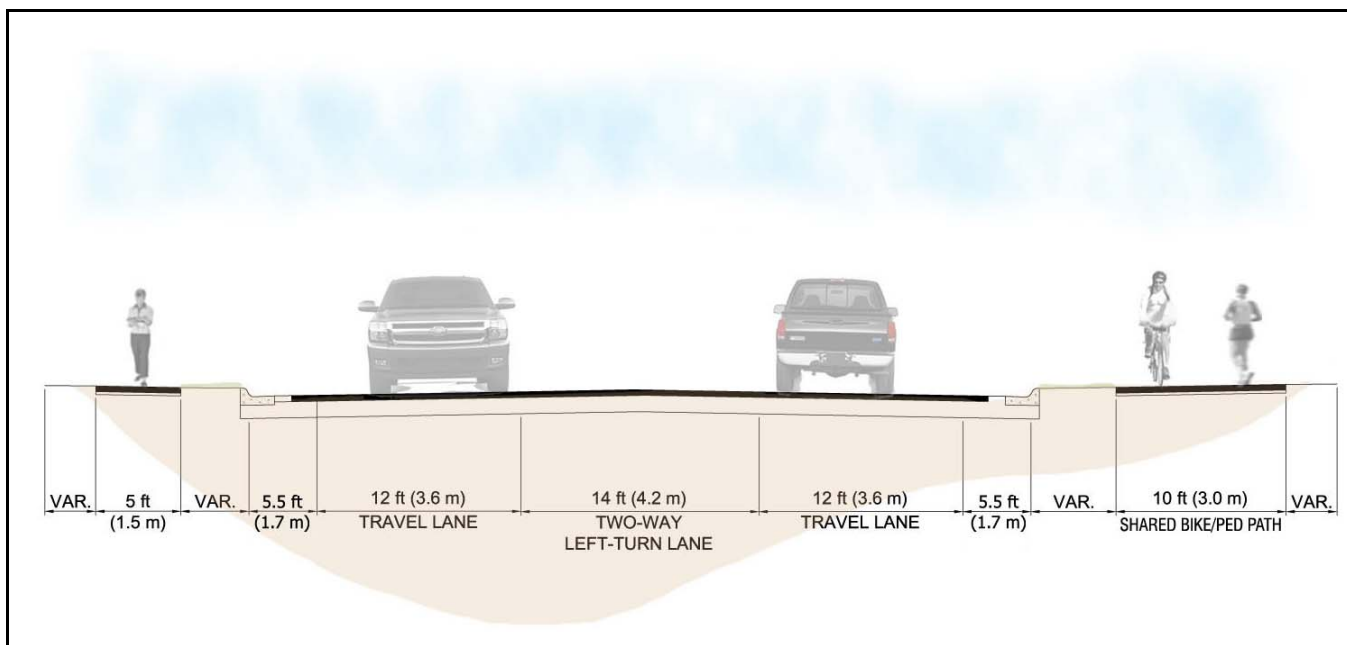


Figure 2-5, MT Highway 78 to Developed Limits of Red Lodge

**Note: This is a conceptual figure based on the preliminary (approximately 30 percent) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization, and mitigation strategies are evaluated, potential impacts may change slightly.*

Developed Limits of Red Lodge to Two Mile Bridge Road

The proposed improvement from the developed limits of Red Lodge to Two Mile Bridge Road includes a 55-foot (15.8-meter) rural typical section with:

- Two 12-foot (3.6-meter) travel lanes
- One 13-foot (3.9-meter) raised median
- Two 5.5-foot (1.7-meter) shoulders
- Two 3.5 foot (1.05-meter) median shoulders
- One 10-foot (3.0-meter) shared bike/ped path on the east side of the roadway

See Figure 2-6, Developed Limits of Red Lodge to Two Mile Bridge Road.

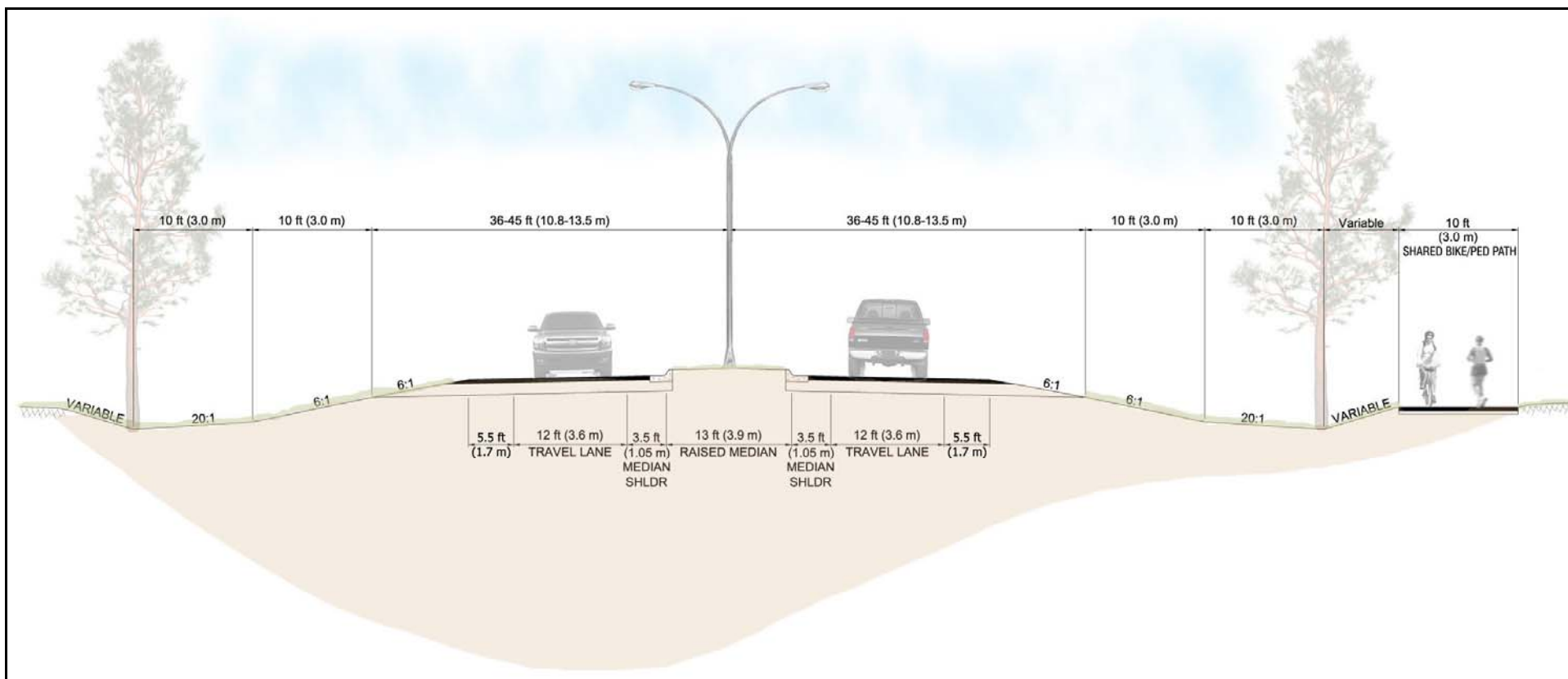


Figure 2-6, Developed Limits of Red Lodge to Two Mile Bridge Road

**Note: This is a conceptual figure based on the preliminary (approximately 30 percent) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization, and mitigation strategies are evaluated, potential impacts may change slightly.*

2.3.1.2 Drainage

The urban-developed portion of Red Lodge within the project limits extends from 8th Street to an area approximately 1,500 feet (460 meters) north of MT Highway 78. Within this area, a curb and gutter section and storm water conveyance system (such as a storm drain, trunk line, and/or open ditch) are proposed to accommodate highway-related storm drainage. Additionally, a new storm drain pipe and outfall may need to be constructed or the existing storm drain pipe (at the intersection of MT Highway 78 and US Highway 212) may need to be replaced, which would be determined during design. Construction of a new storm drain pipe may result in replacement of the existing storm drain and may also result in minor modifications to the existing water or wastewater piping systems within Red Lodge. North of the developed limits of Red Lodge, the typical section for the roadway is anticipated to change from an urban section to a more rural section, which would likely include roadside ditches. If a suitable location for a storm water conveyance system outfall is not identified before the start of the rural typical section, then the storm water conveyance system may discharge into the roadside ditches and flow north to an outfall location to Rock Creek. As appropriate, design of the roadside ditches may include permanent erosion and sediment control measures to manage runoff water quality.

Generally, conveying storm water long distances in roadside ditches is an undesirable situation. However, if site-specific issues make this method of storm water conveyance necessary, two potential Rock Creek outfall locations have been identified on the east side of the highway. The first potential location is approximately 1,150 feet (350 meters) south of Two Mile Bridge Road, where some runoff currently reaches Rock Creek. Use of that outfall location may include installation of a new pipe under the railroad grade and some bank erosion protection along the edge of the creek. The second potential location is along the south side of Two Mile Bridge Road. Use of that outfall location would likely involve conveying runoff via a new vegetated swale, constructed along the south side of Two Mile Bridge Road, to Rock Creek. At that location, bank erosion protection along the edge of Rock Creek may be required to protect the bridge abutment. As the design process continues to evolve, other outfall location sites may be determined to be appropriate.

2.3.1.3 Intersections

There are two locations in Red Lodge with proposed intersection improvements. The first location includes the intersections of Oakes Avenue and 8th Street. The second location includes the intersections of MT Highway 78 and Villard Avenue.

Oakes Avenue and 8th Street

Oakes Avenue intersects US Highway 212 at approximately a 70-degree skew through uncontrolled access in front of the former Pony Express Convenience Store. Nearly all eastbound 8th Street vehicles that turn north onto US Highway 212 are using Oakes Avenue instead of the intersection of 8th Street and US Highway 212. The adjacent Carnegie Library building restricts sight distance from the west approach of 8th Street. Additionally, the Carnegie Library building includes a stairway entrance on US Highway 212, which restricts available room to add pedestrian facilities along US Highway 212. On-street parking in front of the stairway entrance further reduces sight-distance at 8th Street.

The proposed project would realign Oakes Avenue with 7th Street and convert it to a southbound one-way street. Diagonal parking would be provided on both sides of the street. Additionally, the total street width would be narrowed along US Highway 212 at the Carnegie Library to improve sight distance at 8th Street and provide a sidewalk along the east side of the

library. A traffic signal would be installed at 8th Street when warranted and justified; it is anticipated that the signal warrant may be met by year 2020. See Figure 2-7, Oakes Avenue/8th Street Intersections.



Figure 2-7, Oakes Avenue/8th Street Intersections

**Note: This is a conceptual figure based on the preliminary (approximately 30 percent) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization, and mitigation strategies are evaluated, potential impacts may change slightly.*

MT Highway 78 and Villard Avenue

The intersection of MT Highway 78 and US Highway 212 does not have adequate capacity to accommodate the anticipated future traffic volumes (please see Section 3.5.1 for more information).

The intersection of Villard Avenue and US Highway 212 is skewed at about 20 degrees. The area of Villard Avenue in front of the Fire Station consists of open pavement with undefined access. Also, the close proximity of the intersections of Villard Avenue and MT Highway 78 creates additional vehicular conflict points.

The proposed project would replace the MT Highway 78 and US Highway 212 intersection with a single lane roundabout. In addition, the intersection of Villard Avenue and MT Highway 78 would be closed. A cul-de-sac would be constructed at Villard Avenue just south of MT Highway 78. Fourth Street would be extended along the south side of the Visitor Center between US Highway 212 and Villard Avenue, replacing the Visitor Center's south access. *See Figure 2-8, MT Highway 78 / Villard Avenue Intersections.*

2.3.1.4 Access Management

At the request of the City of Red Lodge, MDT and the City of Red Lodge developed an Access Management Plan for the area between MT Highway 78 and Two Mile Bridge Road. This includes the developed area from MT Highway 78 north approximately 2,500 feet (760 meters) as well as the developing area from that point north to Two Mile Bridge Road. *See Figure 2-9, Developed and Developing Limits of Red Lodge.* The purpose of the Access Management Plan is to provide a means for MDT and the City to balance the need for vehicular progression along US Highway 212 with the need for access to adjacent properties.

In the developed area, there are approximately 21 existing access points on US Highway 212 to adjacent properties. The roadway currently consists of two 12-foot travel lanes and two 2-foot shoulders. With the absence of turning lanes, there is potential for differential speed conflicts between vehicles slowing to turn into driveways of adjacent properties and vehicles attempting to use the highway as a through route. This creates a safety concern with an increased potential for rear-end collisions and was cited in MDT's collision analysis as a contributing factor to traffic collisions.

A TWLTL was initially considered for the entire stretch between MT Highway 78 and Two Mile Bridge Road to accommodate turning vehicles accessing adjacent properties while improving progression for through traffic. However, the City of Red Lodge opposed the concept of a TWLTL in the developing area due to concerns that it may encourage commercial strip development.

To accommodate that concern, MDT and the City developed the aforementioned Access Management Plan. The plan identified that a TWLTL would be used in the developed area. For the developing area, a TWLTL would not be used. Instead, access would be managed along the developing area through the use of intersection types (full, $\frac{3}{4}$, and $\frac{1}{2}$ access intersections) and a raised median. The plan identified locations for future intersections based upon existing access points, property lines, plats, development potential, and input from adjacent property owners. The Red Lodge City Council passed Resolution No. 3228 on March 28, 2007, which supported this plan. Pursuant to applicable Montana statutes and MDT policy, the plan would be recommended to the Montana Transportation Commission for their adoption. *See Appendix A, Letter #8, and Figure 2-10, Access Management Plan Overview.*

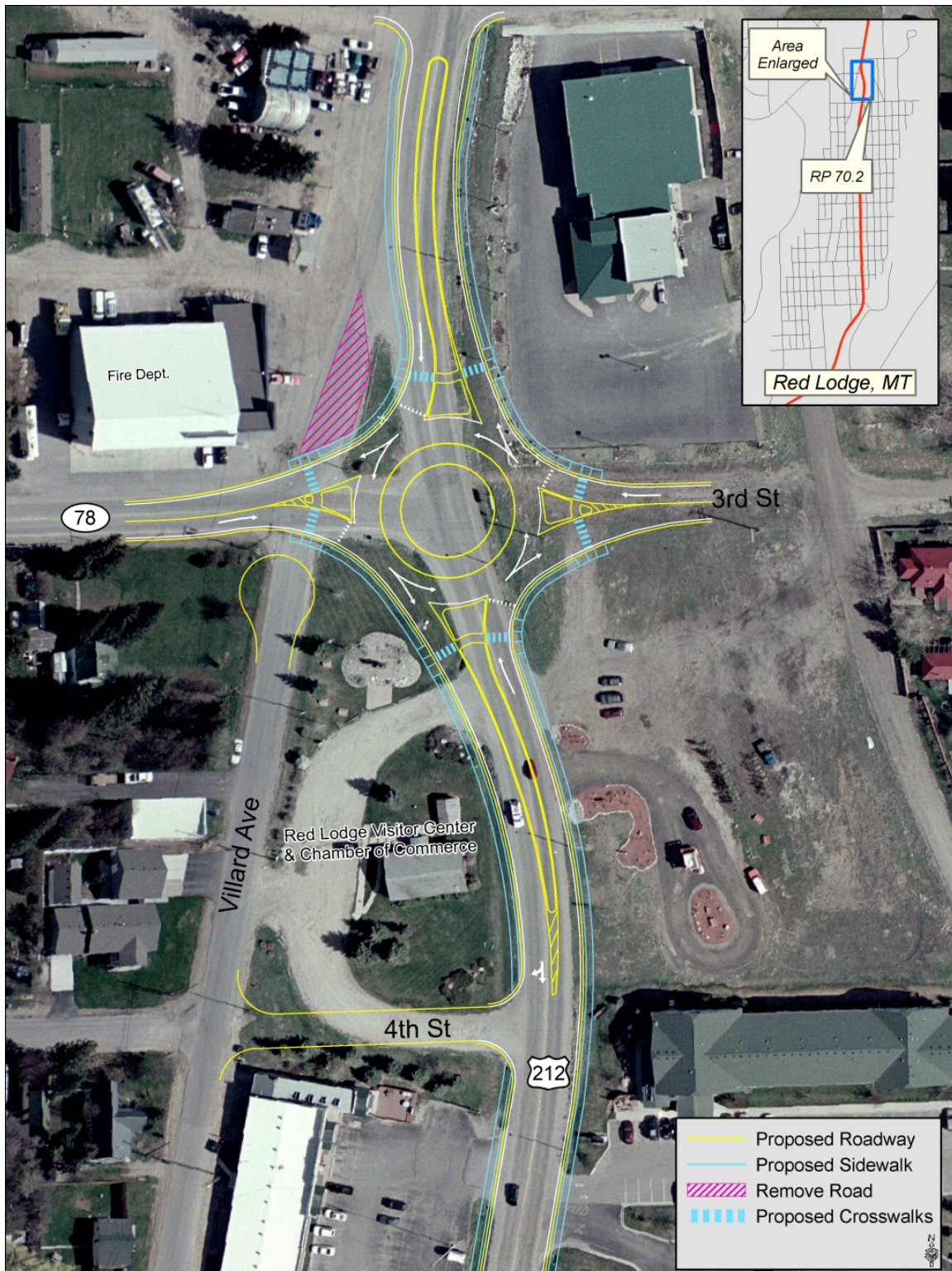


Figure 2-8, MT Highway 78 / Villard Avenue Intersections

**Note: This is a conceptual figure based on the preliminary (approximately 30 percent) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization, and mitigation strategies are evaluated, potential impacts may change slightly.*



Figure 2-9, Developed and Developing Limits of Red Lodge

**Note: This is a conceptual figure based on the preliminary (approximately 30 percent) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization, and mitigation strategies are evaluated, potential impacts may change slightly.*



Figure 2-10, Access Management Plan Overview

**Note: This is a conceptual figure based on the preliminary (approximately 30 percent) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization, and mitigation strategies are evaluated, potential impacts may change slightly.*

Two intersection treatment options were proposed to the public for the full access intersection locations: a conventional full access intersection and a roundabout. See *Figure 2-11, Conceptual Full Access Intersection* and *Figure 2-12, Roundabout Intersection*. At the request of the City of Red Lodge, a roundabout design has been identified as preferred for all of the full access intersection locations. See *Appendix A, Letter #8*.

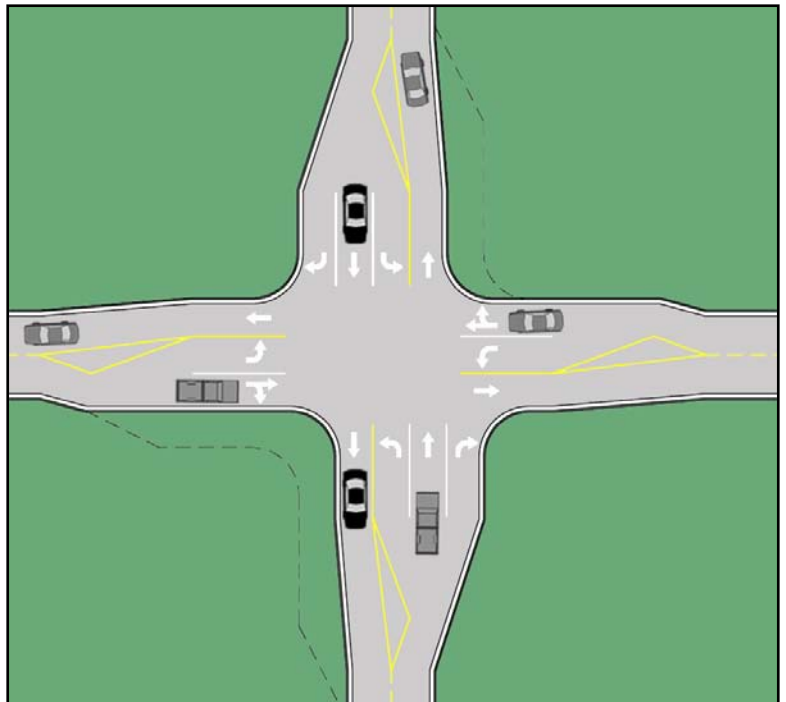


Figure 2-11, Conceptual Full Access Intersection

What is a Roundabout?

Roundabouts should not be confused with traffic circles. Traffic circles have been used for many years in European countries and in parts of the United States in the early half of the 1900s. Roundabouts are a more modern intersection that coincidentally also use a circular island in the center of the intersection. However, roundabouts are designed for modern vehicles, including fire trucks, buses, various sized emergency vehicles, truck and trailer combinations, and snow plows. Roundabouts require entering vehicles to yield to those already in the intersection, while the older traffic circles were susceptible to gridlock by allowing entering vehicles to have the right-of-way over vehicles within the intersection.

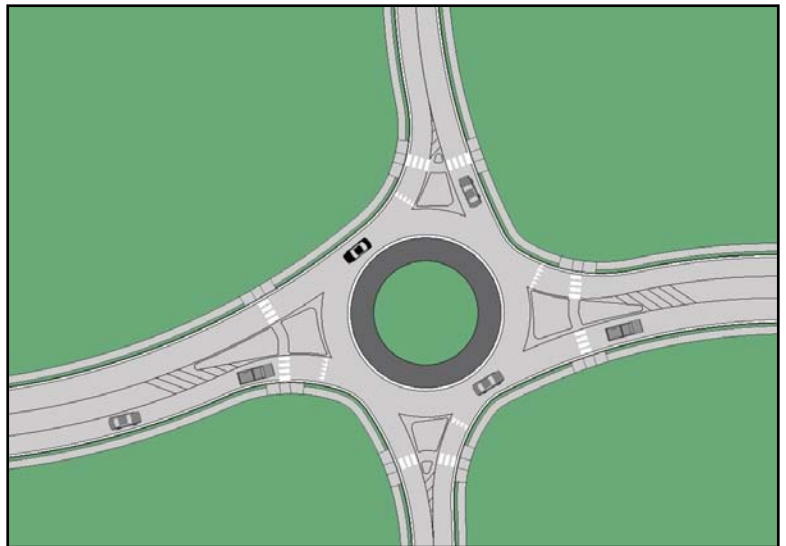


Figure 2-12, Conceptual Roundabout Intersection

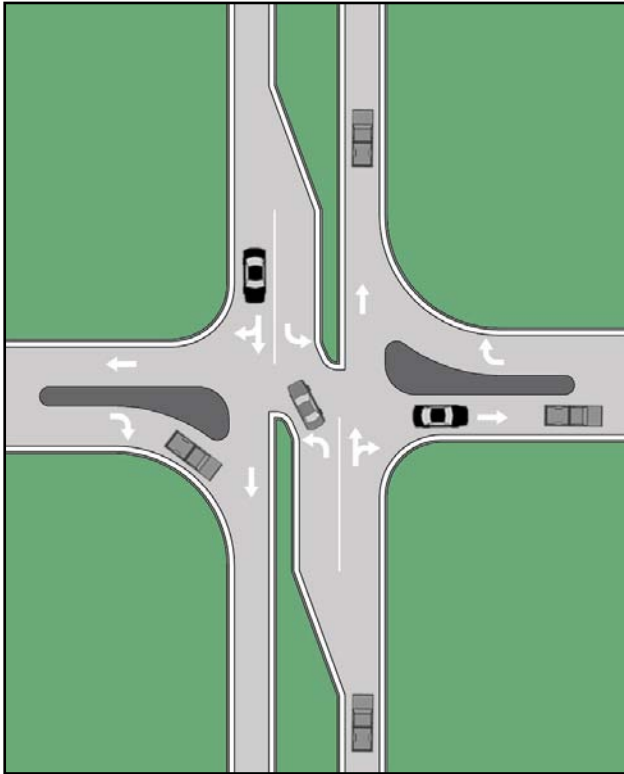


Figure 2-13, Conceptual $\frac{3}{4}$ Access Intersection

The $\frac{1}{2}$ access intersection locations would only allow right-in/right-out turn movements, thereby eliminating left turns and cross-street movements. See Figure 2-14, *Conceptual $\frac{1}{2}$ Access Intersection*.

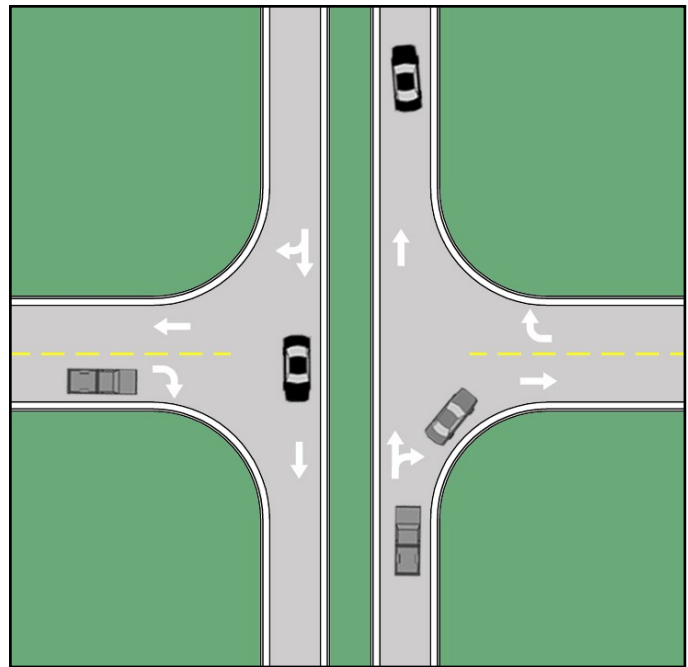


Figure 2-14, Conceptual $\frac{1}{2}$ Access Intersection

The $\frac{3}{4}$ access intersection locations would allow right and left turns onto side streets. However, it would restrict access by eliminating left turns onto major streets and cross-street movements. This intersection option would require concrete islands to direct side street vehicles and would also require a median on US Highway 212 at the intersection. See Figure 2-13, *Conceptual $\frac{3}{4}$ Access Intersection*.

2.3.2 RED LODGE TO ROBERTS

The Preferred Alternative includes the following improvements for US Highway 212 between Red Lodge and Roberts:

- One typical section
- Drainage improvements

2.3.2.1 Typical Section

Two Mile Bridge Road to south end of Roberts

The proposed improvement from Two Mile Bridge Road to the south end of Roberts includes a 40-foot (12.0-meter) rural section with:

- Two 12-foot (3.6-meter) travel lanes
- Two 8-foot (2.4-meter) shoulders²
- A bus turnaround approximately one-mile (1.6 kilometers) north of Fox Road at the present state maintenance site
- A one-mile (1.6-kilometer) northbound passing lane

See Figure 2-15, Two Mile Bridge Road to South End of Roberts.

2.3.2.2 Drainage

Some culverts between Red Lodge and Roberts carry water generally from the west side of the roadway to the east side of the roadway. The existing drainage patterns generally parallel the roadway northward. Drainage patterns and culvert locations are expected to remain the same with implementation of the proposed project.

Numerous irrigation ditches are currently located within the right-of-way limits of the proposed project. The proposed project may involve relocating those irrigation ditches outside of the new right-of-way, in accordance with MDT's general practice.

² This would provide adequate width for future overlays.

2.3.3 ROBERTS

The Preferred Alternative includes the following improvements for Roberts:

- One primary typical section, with a modification by Roberts School to avoid impacts (See page 2-23)
- Drainage improvements (See page 2-24)
- Intersection improvements at Cooney Dam Road (See page 2-25)
- Safety improvements for pedestrians (See page 2-25)

2.3.3.1 Typical Sections

Within Roberts, there is one typical section. A slight modification of the typical section was required adjacent to Roberts School, between East Maple Street and the north end of Roberts. See *Figure 2-16, Roberts Typical Section Locations*.

South end of Roberts to East Maple Street

The proposed improvement from the south end of Roberts to East Maple Street includes a 46-foot (13.8-meter) rural section with:

- Two 12-foot (3.6-meter) travel lanes
- Two 4-foot (1.2-meter) shoulders
- One 14-foot (4.2-meter) TWLTL³

See *Figure 2-17, South End of Roberts to East Maple Street*.

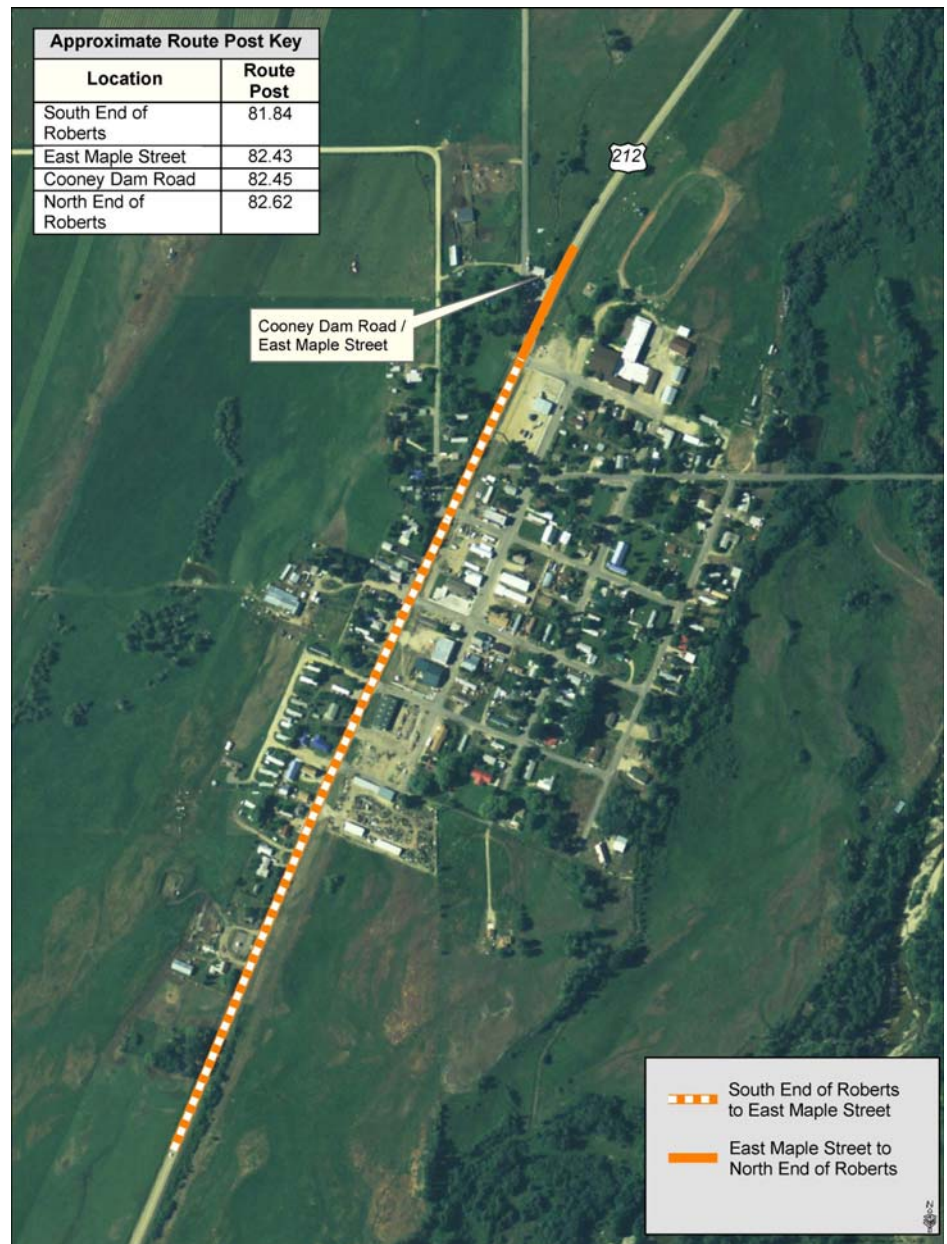


Figure 2-16, Roberts Typical Section Locations

**Note: This is a conceptual figure based on the preliminary (approximately 30 percent) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization, and mitigation strategies are evaluated, potential impacts may change slightly.*

³ MDT's standard width for a TWLTL is 14 feet (4.2 meters). The TWLTL at this location may be reduced to a 12-foot (3.6-meter) TWLTL in order to reduce right-of-way impacts. This would be determined during the design phase of the proposed project.

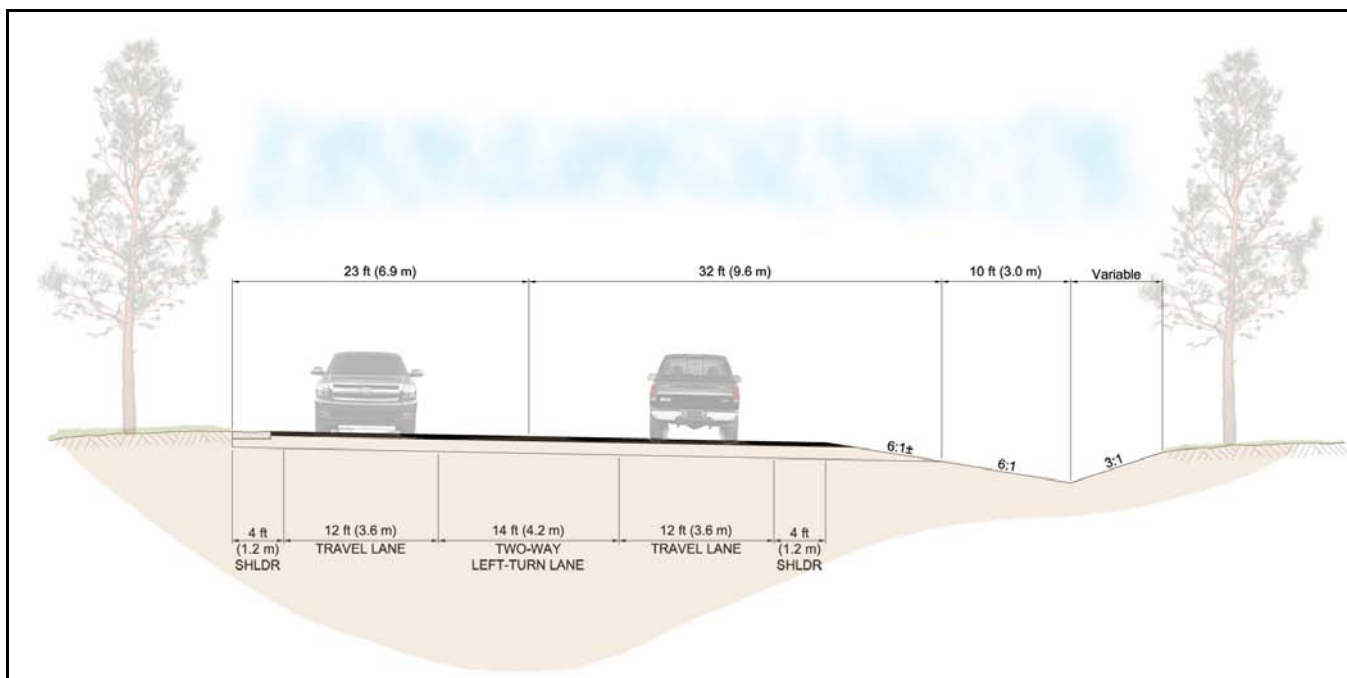


Figure 2-17, South End of Roberts to East Maple Street

**Note: This is a conceptual figure based on the preliminary (approximately 30 percent) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization, and mitigation strategies are evaluated, potential impacts may change slightly.*

East Maple Street to north end of Roberts

A modification of the typical section was developed for the sub-segment between East Maple Street and the north end of Roberts to avoid impacts to Roberts School and to meet the request of Roberts School for a guardrail along school property.

The proposed improvement from East Maple Street to the north end of Roberts includes a 46-foot (13.8-meter) rural section with:

- Two 12-foot (3.6-meter) travel lanes
- Two 4-foot (1.2-meter) shoulders
- One 14-foot (4.2-meter) TWLTL⁴
- 2:1 inslope with guardrail on east side

See Figure 2-18, East Maple Street to North End of Roberts.

⁴ MDT's standard width for a TWLTL is 14 feet (4.2 meters). The TWLTL at this location may be reduced to a 12-foot (3.6-meter) TWLTL in order to reduce right-of-way impacts. This would be determined during the design phase of the proposed project.

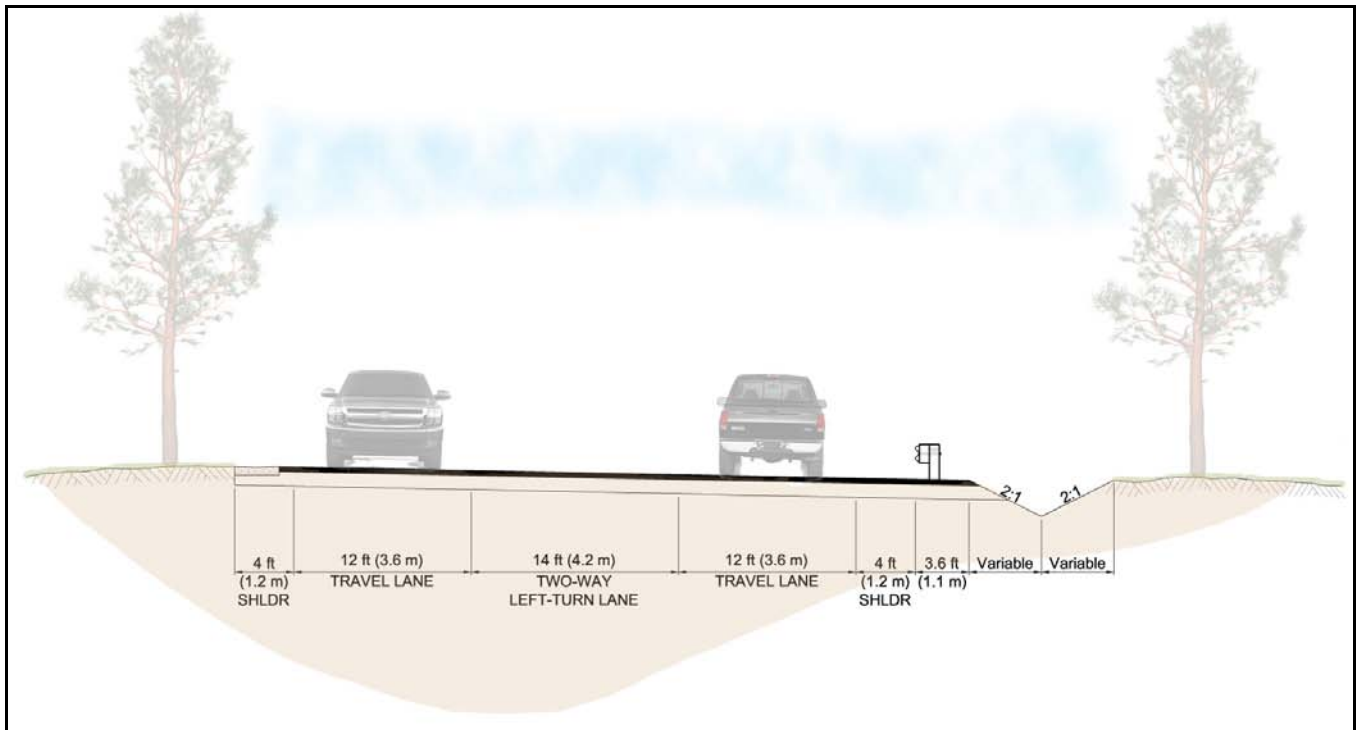


Figure 2-18, East Maple Street to North End of Roberts

**Note: This is a conceptual figure based on the preliminary (approximately 30 percent) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization, and mitigation strategies are evaluated, potential impacts may change slightly.*

2.3.3.2 Drainage

A large drainage area lies west of the roadway. Within this area, flood irrigation operations contribute additional water to the drainage. The drainage parallels the roadway from south of the Fox Road and drains northward along the west edge of Roberts. Because the portion of Roberts west of the roadway sits in one of the swales of the drainage, the potential exists to flood homes in Roberts, as occurred in 2005 and 2007. It is beyond the scope of this project to address floodwaters entering Roberts from the drainage to the west. Goals of the proposed project would be to convey as much highway-related storm water as practicable toward Rock Creek prior to Roberts, and within Roberts to satisfactorily convey storm water intercepted by the highway towards Rock Creek. For example, berms may be constructed perpendicular to flow east and west of the highway, approximately 1,400 feet (425 meters) south of Birch Street in Roberts. At that location an existing centerline culvert is currently planned to be replaced. The existing downstream drainage channel located on the east side of the highway may be enlarged and re-graded to convey more runoff to Rock Creek.

Within the community of Roberts, it is anticipated that runoff from the roadway would be directed to open ditches and/or pipes. The ditches and/or pipes would carry the runoff to roadside ditches located north of Roberts.

2.3.3.3 Intersection

There is one location in Roberts with proposed intersection improvements: the intersection of Cooney Dam Road and US Highway 212, near East Maple Street. Cooney Dam Road forms a 27-degree skewed intersection with US Highway 212 and is offset from East Maple Street. This is the busiest intersection in Roberts, with a convenience store (Y-Stop) located on the west side of US Highway 212 directly across from the school. The convenience store has uncontrolled access on its frontage with US Highway 212 and along Cooney Dam Road.

The Preferred Alternative would realign Cooney Dam Road to form a single intersection perpendicular with US Highway 212 approximately 430 feet (130 meters) north of East Maple Street. Access to the Y-Stop would be provided as determined through coordination with the business owner during project design. *See Figure 2-19, Cooney Dam Road Intersection (near East Maple Street).*

2.3.3.4 Pedestrian Facilities

The community of Roberts completed a sidewalk project in 2005, which placed sidewalk along First Street, one block east of and parallel to US Highway 212. As part of that project, sidewalks were also placed on East Maple Street, Cedar Street, and Oak Street, to provide connections from US Highway 212 to the new sidewalk on First Street. The goal of that project was to provide a facility for pedestrians, including those walking to and from school, on a local road rather than on the highway. There are existing crosswalks at Oak Street and north of East Maple Street. School crossing signs, including advance warning signs, and post-mounted flashing beacons are also associated with these crossing locations.

The Preferred Alternative would include one block of sidewalk along Pine Street from US Highway 212 east to connect to the sidewalk on First Street. Crosswalks would also be provided at the intersections of Oak, Cedar, Pine, and East Maple Streets along US Highway 212. School advance warning and school crosswalk warning signs, including flashing beacons, would be installed in accordance with current design guidelines.

2.3.4 ROBERTS TO BOYD

The Preferred Alternative includes the following improvements for the area from Roberts to Boyd:

- One primary typical section, with a modification at Boyd Country Store
- Drainage improvements (See page 2-28)
- Intersection improvements at three locations (See page 2-31)
 - Clear Creek Road
 - Cooney Dam Road
 - Main Street

2.3.4.1 Typical Sections

From Roberts to Boyd, one typical section is proposed for the majority of the segment with a modification in the vicinity of the Boyd Country Store to improve safety. *See Figure 2-20, Roberts to Boyd Typical Section Locations.*

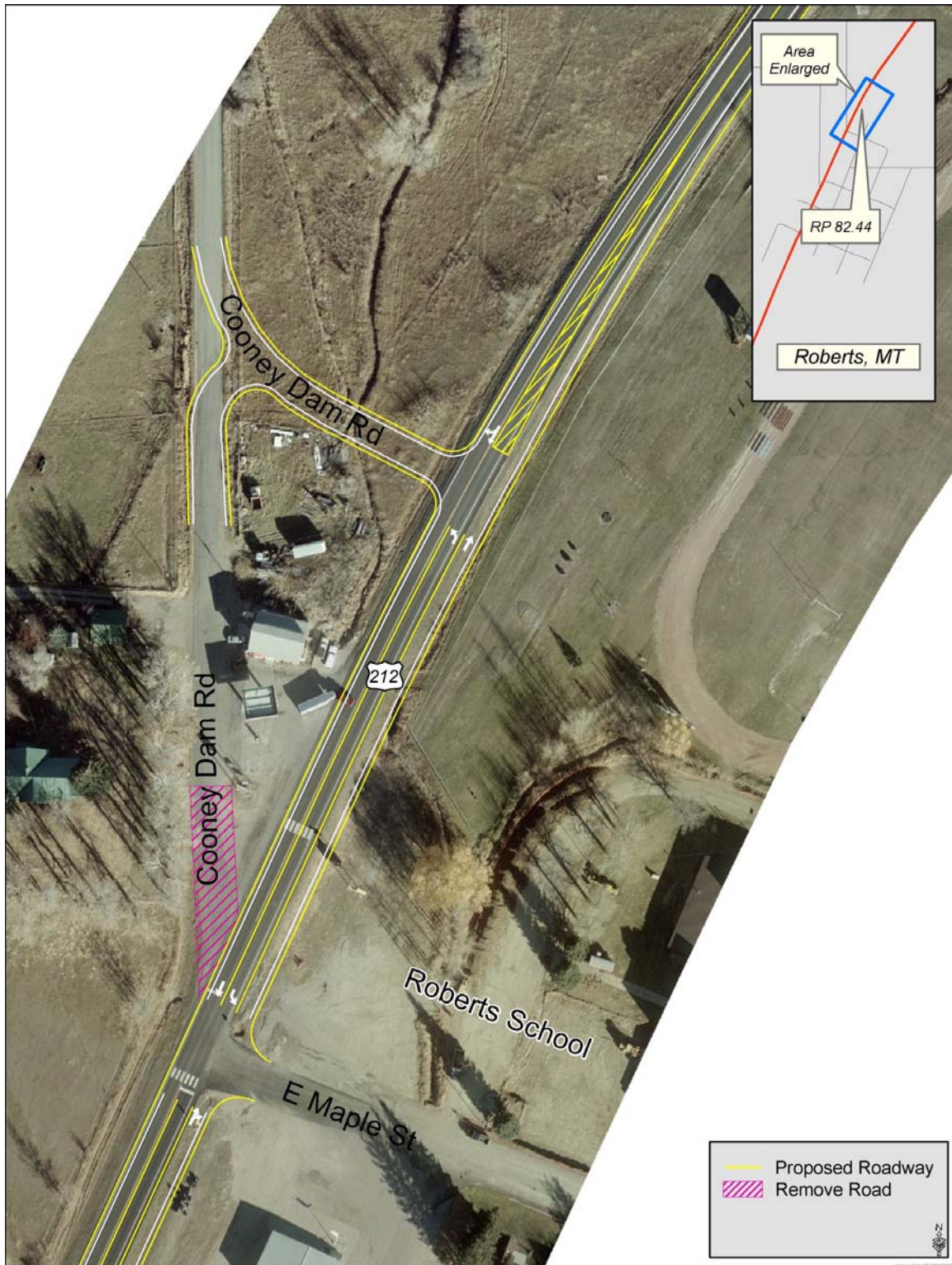


Figure 2-19, Cooney Dam Road Intersection (near East Maple Street)

Note: This is a conceptual figure based on the preliminary (approximately 30 percent) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization, and mitigation strategies are evaluated, potential impacts may change slightly.

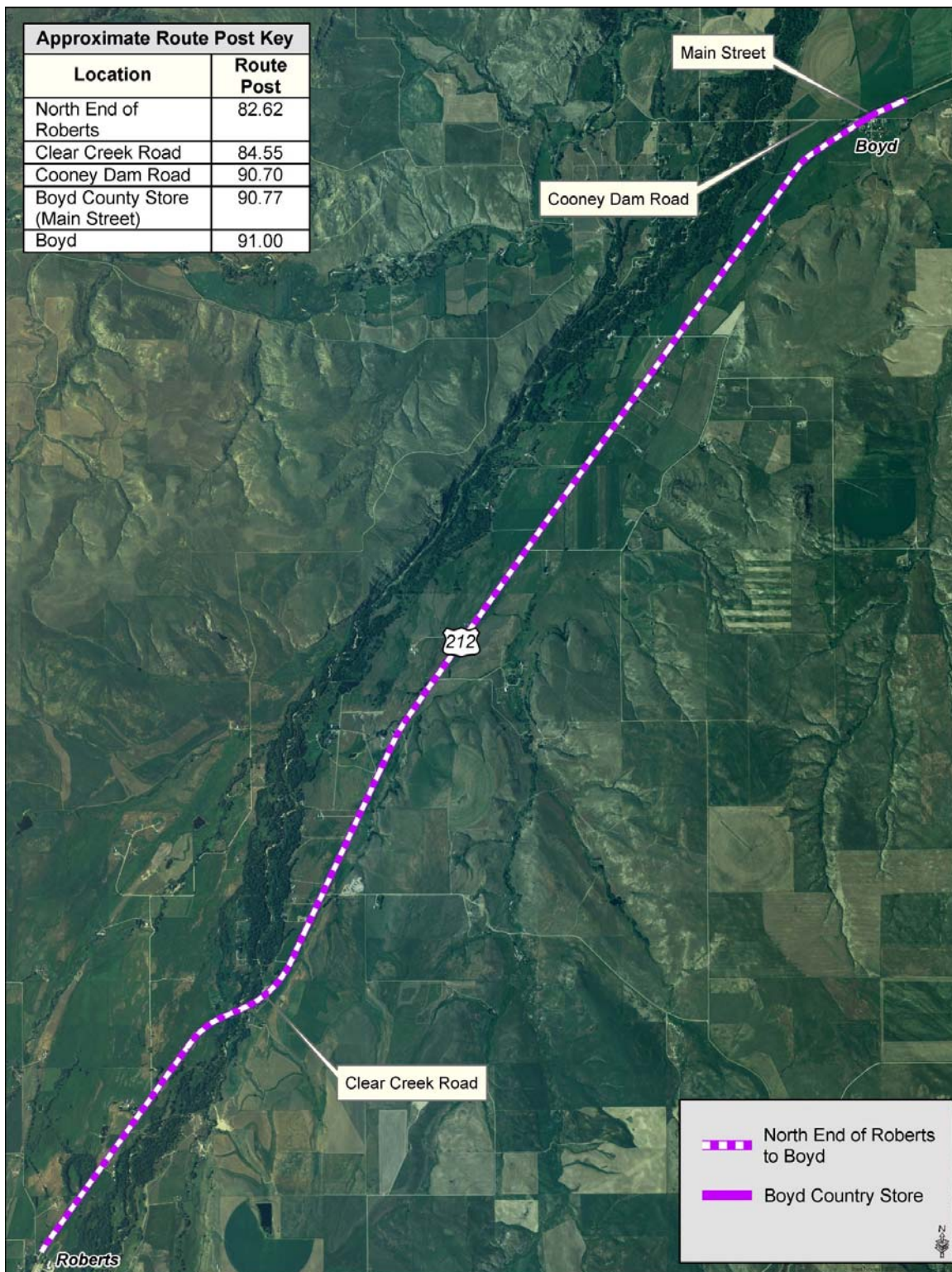


Figure 2-20, Roberts to Boyd Typical Section Locations

Note: This is a conceptual figure based on the preliminary (approximately 30 percent) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization, and mitigation strategies are evaluated, potential impacts may change slightly.

North end of Roberts to Boyd

The proposed improvement from the north end of Roberts to Boyd includes a 40-foot (12.0-meter) rural typical section with:

- Two 12-foot (3.6-meter) travel lanes
- Two 8-foot (2.4-meter) shoulders⁵
- A bus turnaround approximately 3 miles (4.8 kilometers) south of Boyd at the school district boundary
- A one-mile (1.6-kilometer) northbound passing lane north of Roberts
- A one-mile (1.6-kilometer) southbound passing lane south of Boyd

See Figure 2-21, North End of Roberts to Boyd.

The exception to this typical section would be at the Boyd Country Store where the road would become a 52-foot (15.6-meter) rural typical section with:

- Two 12-foot (3.6-meter) travel lanes
- Two 8-foot (2.4-meter) shoulders
- A southbound 12-foot (3.6-meter) left-turn lane
- A reverse curb to delineate the Boyd Country Store parking lot from the roadway and to manage access to US Highway 212

See Figure 2-22, North End of Roberts to Boyd – Boyd Country Store.

2.3.4.2 Drainage

Existing drainage patterns and culvert locations are expected to remain the same in the design of the proposed project. Several irrigation ditches that are currently located within the right-of-way limits for the proposed project are expected to be relocated outside of the new right-of-way in accordance with MDT's general practice.

⁵ This would provide adequate width for future overlays.

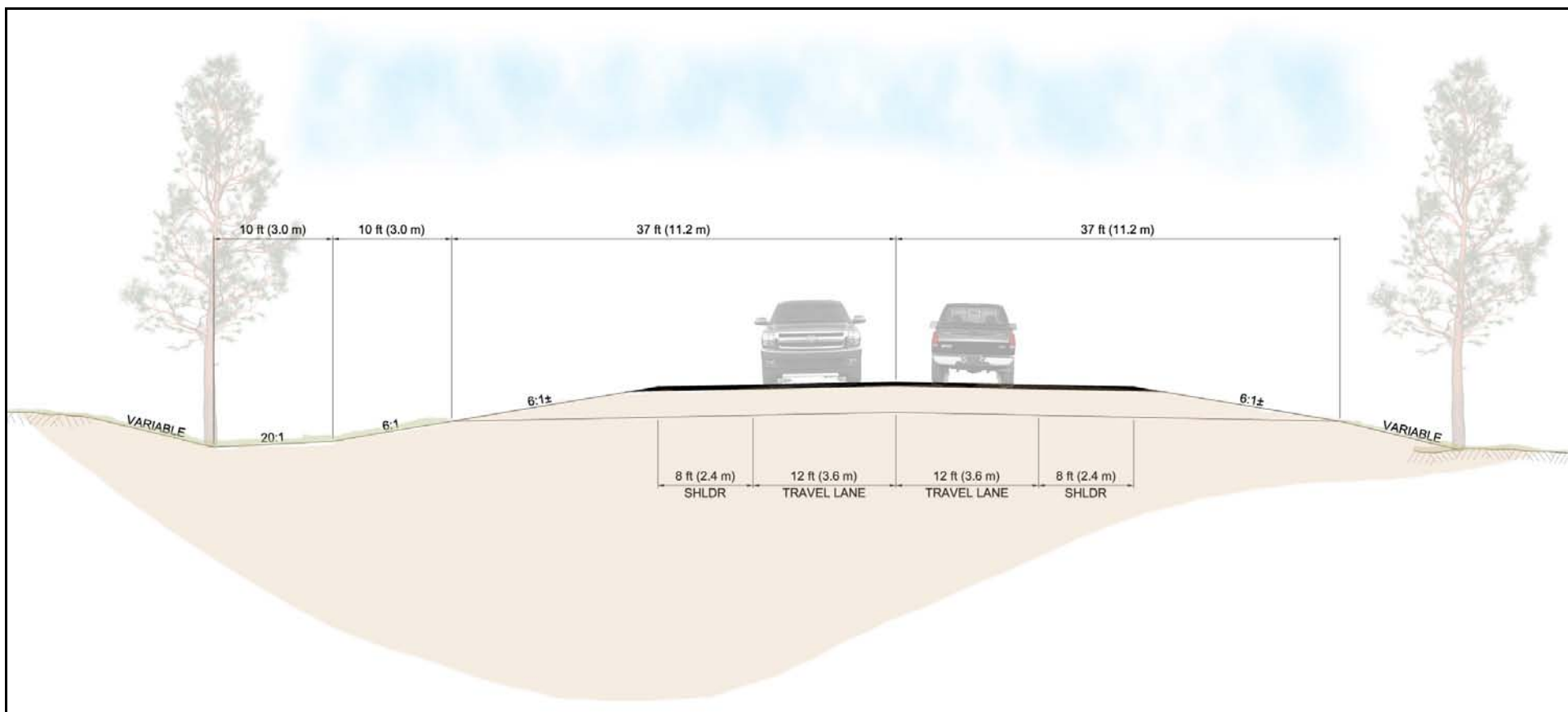


Figure 2-21, North End of Roberts to Boyd

**Note: This is a conceptual figure based on the preliminary (approximately 30 percent) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization, and mitigation strategies are evaluated, potential impacts may change slightly.*

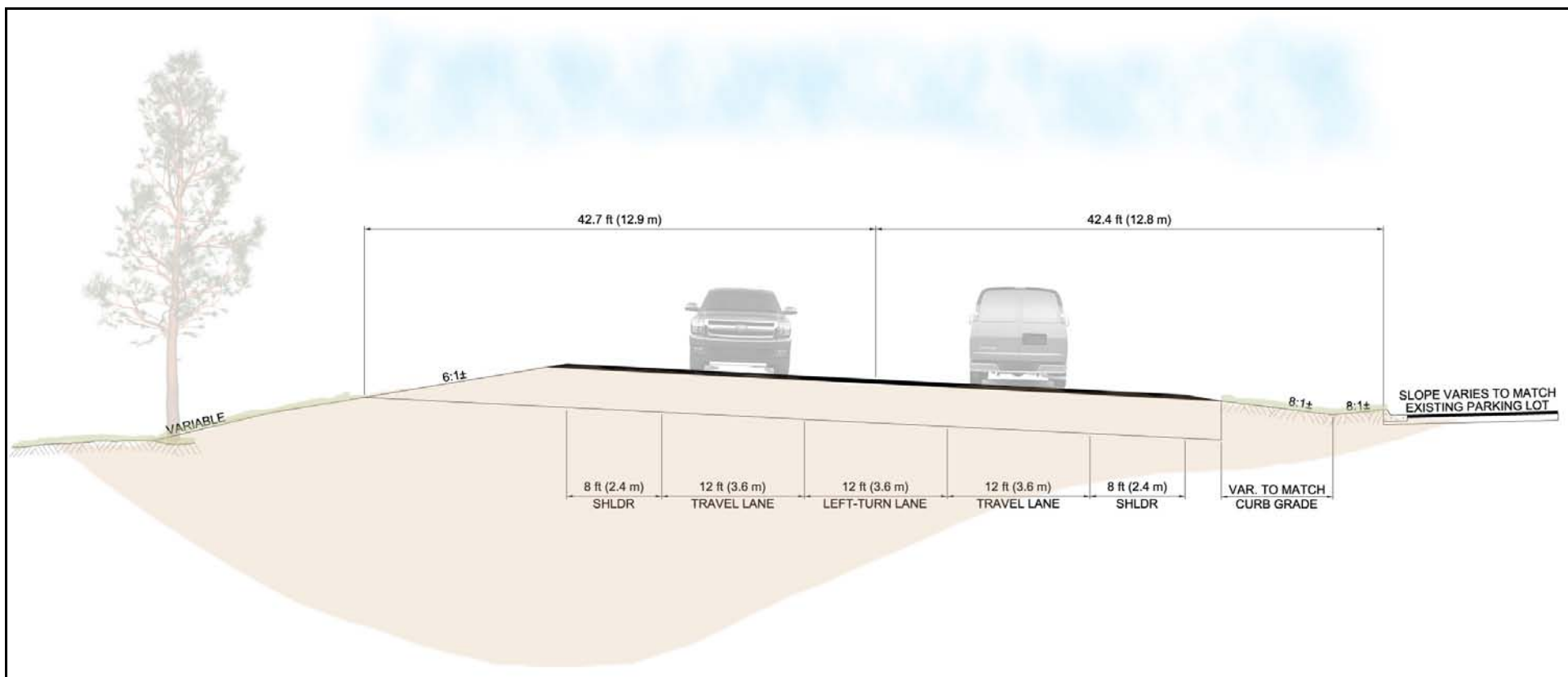


Figure 2-22, North End of Roberts to Boyd – Boyd Country Store

**Note: This is a conceptual figure based on the preliminary (approximately 30 percent) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization, and mitigation strategies are evaluated, potential impacts may change slightly.*

2.3.4.3 Intersections

There are three locations between the north end of Roberts and Boyd with proposed intersection improvements: (1) Clear Creek Road, (2) Cooney Dam Road, and (3) Main Street.

Clear Creek Road

Clear Creek Road is located across from the rest area between the two rest area access approaches, forming an offset intersection with both approaches. The Preferred Alternative would realign Clear Creek Road with the south access of the rest area. In addition, improvements to the rest area sidewalks and ramps may be included as part of the proposed project. *See Figure 2-23, Clear Creek Road Intersection.*

Cooney Dam Road

The Cooney Dam Road intersection is located on the northwest side of Boyd and has two forks, both of which intersect US Highway 212. The north fork intersects US Highway 212 at a skew, while the south fork intersects US Highway 212 at a right angle. On Cooney Dam Road, westbound traffic from the north and south forks must merge, creating a conflict point. The proposed project would close the northern fork of Cooney Dam Road and add a southbound right-turn lane on US Highway 212 to Cooney Dam Road. *See Figure 2-24, Cooney Dam Road and Main Street Intersections.*

Main Street

Main Street is located on the east side of US Highway 212, north of the Boyd Country Store. Main Street intersects US Highway 212 at a skewed angle. The Boyd Country Store has uncontrolled access along its frontage with US Highway 212 and Main Street. Additionally, there are no deceleration lanes on US Highway 212 to provide protection for turning vehicles accessing Main Street or the Boyd Country Store; this creates a differential speed conflict. The Preferred Alternative would realign Main Street to be perpendicular with US Highway 212. In addition, a southbound left-turn lane would be added on US Highway 212 to provide protection for slowed or stopped highway traffic accessing Main Street. A reversed curb line would be constructed between the Boyd Country Store parking lot and US Highway 212 to delineate access. Access to the Boyd Country Store would be provided off of Main Street. *See Figure 2-24, Cooney Dam Road and Main Street Intersections.*

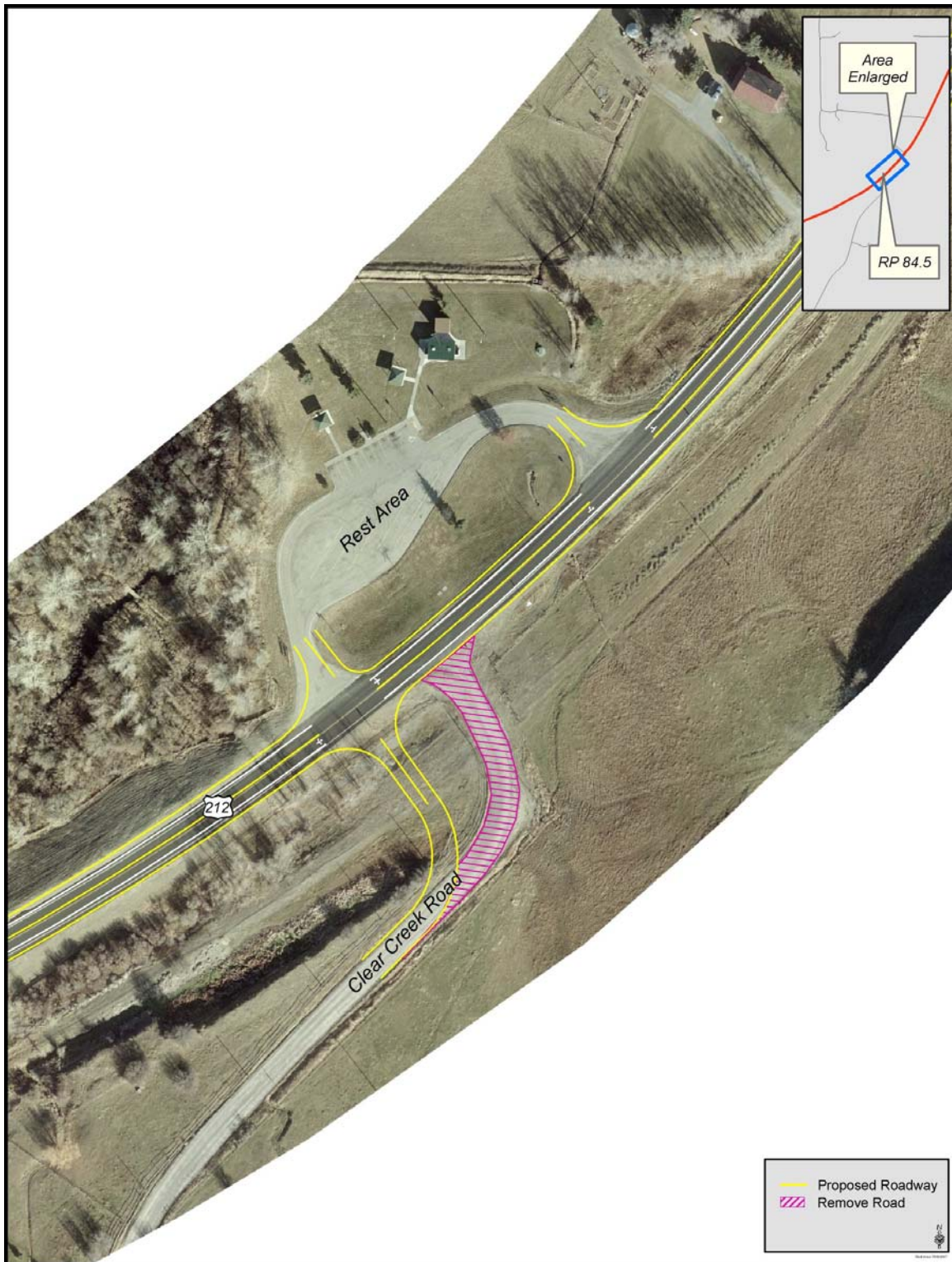


Figure 2-23, Clear Creek Road Intersection

Note: This is a conceptual figure based on the preliminary (approximately 30 percent) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization, and mitigation strategies are evaluated, potential impacts may change slightly.

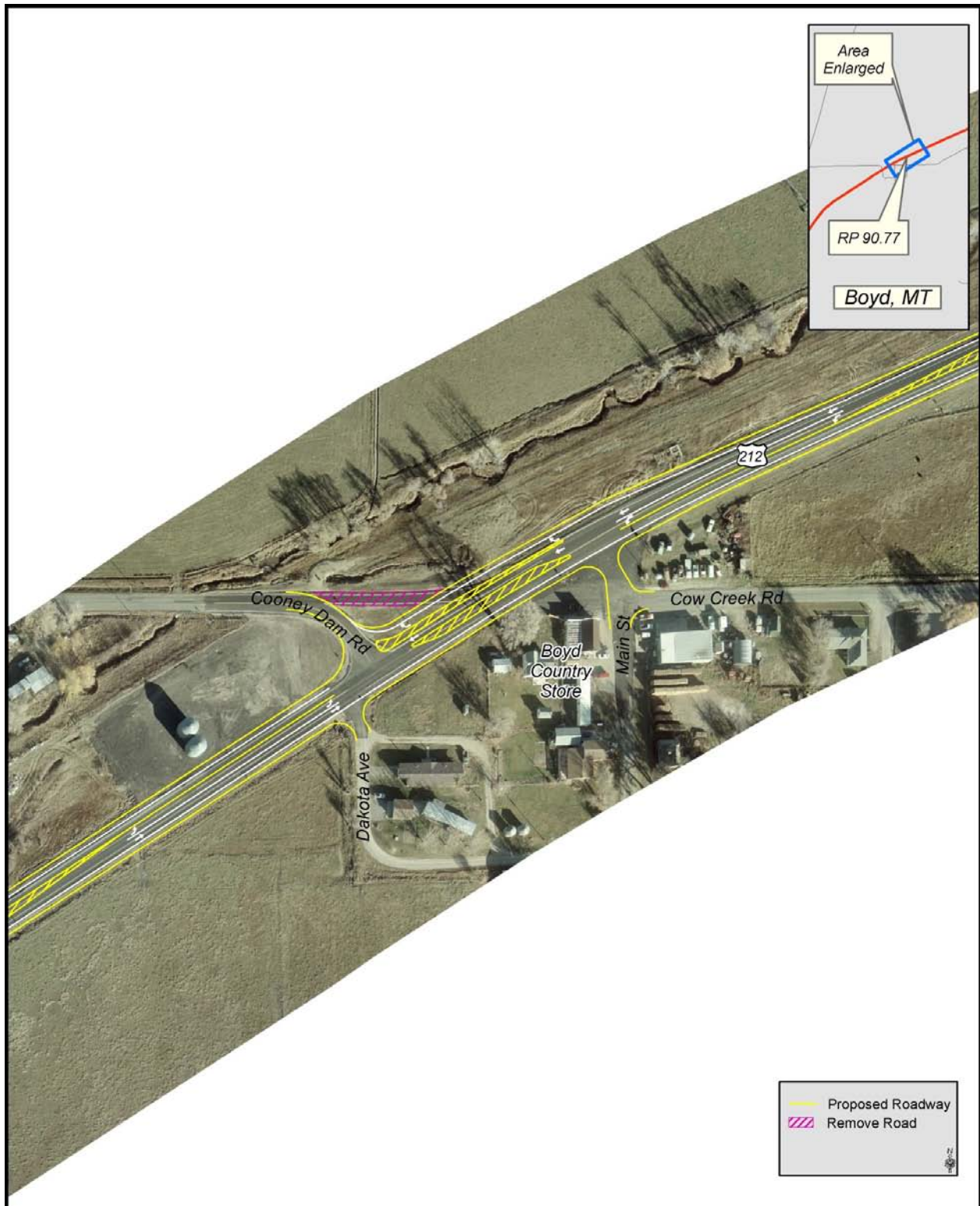


Figure 2-24, Cooney Dam Road and Main Street Intersections

Note: This is a conceptual figure based on the preliminary (approximately 30 percent) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization, and mitigation strategies are evaluated, potential impacts may change slightly.

2.4 ALTERNATIVES ELIMINATED FROM FURTHER STUDY

Throughout the EA process the options under consideration for the project corridor have continuously evolved based on input from the Red Lodge City Council and Carbon County Commission, public comments, existing and planned development, and data collected pertaining to engineering factors and environmental considerations.

In addition to the Preferred Alternative discussed in the previous sections, numerous other ideas were evaluated to varying levels of detail and discarded from further analysis for a number of possible reasons, such as a failure to meet the purpose and need, anticipated undesirable and unavoidable impacts, or public comments. Following is a brief summary of options that were considered and then eliminated from further study in this EA.

2.4.1 Red Lodge

In Red Lodge, options that were considered and then eliminated from further study include:

- ***Options for bicycle lanes, sidewalks, and shared bike/ped paths.*** The City identified a need to accommodate pedestrians and bicyclists along US Highway 212. In the early stages of project planning, the Red Lodge City Council requested that a shared bike/ped path on the east side of the roadway from 8th Street to Two Mile Bridge Road and a sidewalk on the west side of the roadway from 8th Street to the city limits be incorporated into this project and the Red Lodge Park Board requested a shared bike/ped path from 8th Street to the city limits. These preferences were used to develop options for various locations (in relation to the roadway) and widths (based on MDT guidelines and available space) of pedestrian and bicycle facilities. Options mainly consisted of combinations of 5-foot sidewalks and 10-foot shared bike/ped paths between 8th Street and Two Mile Bridge Road. These options were eventually eliminated based on impacts to the surrounding area and City preferences, which were solidified in 2006 when Red Lodge approved a Comprehensive Trails Plan; this is reflected in the Preferred Alternative.
- ***Options for parking lanes.*** The City identified a need for additional downtown parking in Red Lodge, primarily between 8th Street and MT Highway 78. A 9.5-foot (2.9-meter) and 12-foot (3.6-meter) parking lane width (based on MDT guidelines and available space) and location (based on need for parking) were evaluated in cooperation with the City prior to identification of the preferred typical sections. These options were eventually eliminated based on impacts to the surrounding area and City preferences.
- ***A TWLTL between the developed limits of Red Lodge and Two Mile Bridge Road.*** Based on anticipated growth in northern Red Lodge, particularly the area from approximately 2,500 feet (760 meters) north of MT Highway 78 to Two Mile Bridge Road, preliminary project recommendations included the use of a shared TWLTL between MT Highway 78 and Two Mile Bridge Road. The use of a TWLTL would have reduced the potential for differential speed conflicts from turning vehicles while providing access to the developed and developing areas adjacent to the corridor. However, the City of Red Lodge opposed the concept of a TWLTL along the developing northern segment. Through coordination with the City, adjacent property owners, and the general public, an access management plan was developed for this area. This plan identified the use of a TWLTL from MT Highway 78 north for approximately 2,500 feet (760 meters), to the northern limits of the developed portion of Red Lodge. For the developing portions of the corridor (from that point north to Two Mile Bridge Road), a raised median and pre-determined access locations/types were agreed upon to manage access.

- **Options for Oakes Avenue Intersection.** The Oakes Avenue intersection with US Highway 212 is skewed, presenting traffic safety concerns, particularly for vehicles traveling north on Oakes Avenue and wanting to turn onto US Highway 212. Preliminary options for Oakes Avenue included closing Oakes Avenue between its junction with US Highway 212 and 8th Street; closing the Oakes Avenue/US Highway 212 intersection and turning Oakes Avenue into a dead end; and realigning the Oakes Avenue/US Highway 212 intersection to be perpendicular and leaving it open for two-way traffic. Through coordination with the City, it was determined that the conversion of Oakes Avenue to a one-way, southbound roadway with diagonal parking on both sides would be more advantageous for the City than the other options. The Preferred Alternative provides additional downtown parking, which is needed in the City, while improving safety conditions. This concept also reflects coordination with the proposed Bank of Red Lodge development.
- **Options for MT Highway 78 and Villard Avenue intersections.** Several options were explored for the MT Highway 78 and Villard Avenue intersections prior to identification of the Preferred Alternative. These included use of a standard, signalized intersection at MT Highway 78 and options for closure of Villard Avenue north or south of MT Highway 78. However, the City requested that a roundabout be considered for the MT Highway 78 intersection instead of a traffic signal. MDT investigated the roundabout option, and for a number of reasons previously described, the roundabout became the preferred option for this location. The traffic signal was eliminated from further study. Likewise, it was determined through coordination with the City that maintaining closure of Villard Avenue north of MT Highway 78, and conversion of the south leg of Villard Avenue to a dead end, would meet the needs of the adjacent property owners while improving safety conditions.
- **Turn lanes at Two Mile Bridge Road.** Northbound and southbound turn lanes were requested by the Mayor and deemed to be warranted by MDT standards. Throughout development of the Access Management Plan it was determined to use a roundabout at this location instead of a conventional intersection design.

2.4.2 Red Lodge to Roberts

Between Red Lodge and Roberts, one option was considered and eliminated from further study:

- **Narrower shoulder widths.** These included 4-foot shoulders, and a combination of 4-foot paved shoulders with 4-foot gravel shoulders. The wider shoulders (now preferred) would provide additional safety, an improved level of operation, and were also desired by the public.

2.4.3 Roberts

In Roberts, options considered and then eliminated from further study include:

- **Parking lanes and sidewalks.** Parking lanes were eliminated due to the higher speed roadway and no identified need for on-street parking. Sidewalks were not needed because a previous project placed sidewalks one block east of and parallel to 212 to provide pedestrian accommodations off of the highway.
- **Typical Section presented at a public meeting.** At a public meeting in 2003, a typical section consisting of two 12-foot travel lanes, two 7.5-foot shoulders, two 7-foot sidewalks, and curb and gutter on both sides of the roadway was presented to the public as an option. However, following the collection and analysis of traffic data, it was determined that a TWLTL between the south end of Roberts and East Maple Street was

warranted and that sidewalks were not needed, for the reasons described above. Also, there was available right-of-way to accommodate storm water drainage using a cross-sloped roadway and roadside ditch rather than curb and gutter.

- **Options for Cooney Dam Road and East Maple Street intersections.** Cooney Dam Road in Roberts is a skewed intersection and also forms an offset intersection with East Maple Street. Options evaluated for these intersections included realignment of East Maple Street to directly oppose Cooney Dam Road, realignment of Cooney Dam Road to a right angle, and realignment Cooney Dam Road to directly oppose East Maple Street. The realignment of East Maple Street was ruled out to avoid impacts to Roberts School, which is a Section 4(f) and 6(f) property as discussed further in Chapters 3 and 4. The other options for realigning Cooney Dam Road were ruled out because they would not provide substantial reductions in traffic conflicts.

2.4.4 Roberts to Boyd

From Roberts to Boyd, options considered and eliminated from further study include:

- **Narrower shoulder widths.** These included 4-foot shoulders, and a combination of 4-foot paved shoulders with 4-foot gravel shoulders. The wider shoulders would provide additional safety, an improved level of operation, and were also desired by the public.
- **Options for Clear Creek Road/Rest Area intersections.** Options for these intersections included realigning both rest area accesses to 90-degree angles, combining both rest area accesses into one access, the addition of acceleration/deceleration lanes at the rest area, and not realigning Clear Creek Road. These options were ruled out for the following reasons: The existing rest area accesses are approximately at an 85-degree skew, which is acceptable under MDT design standards; combining the rest area accesses would not allow for adequate internal traffic circulation; the addition of acceleration/deceleration lanes was not warranted; and maintaining an offset intersection at this location would not improve traffic, safety, and operation.
- **Two options for Dakota Avenue intersection.** The closure of Dakota Avenue or its conversion to a right-in/right-out access only were both considered as potential safety improvements and then ruled out from further analysis. The Carbon County Commissioners and community of Boyd do not want Dakota Avenue closed, so that it may still accommodate school buses and emergency vehicles. The right-in/right-out access option would require a median, which would be a safety concern due to the close proximity to a high speed highway.
- **Options for Cooney Dam Road intersection.** Early options for the Cooney Dam Road intersection were to realign the north fork of Cooney Dam Road to the north to directly oppose Main Street or to maintain both approaches. These options were eliminated to minimize wetland impacts and improve safety conditions.
- **Delineate the parking lot of the Boyd Country Store with guardrail.** The guardrail option was eliminated because it was not desirable for maintenance purposes and may pose safety concerns due to the traffic speed limit.

2.4.5 Project Corridor

For the project corridor as a whole, the following options were considered and eliminated from further study:

- **Additional travel lanes.** Based on public input, a four-lane divided roadway for the entire project corridor was considered. A traffic operations analysis was conducted to evaluate this option. Based on the existing and projected urban and rural traffic volumes,

the existing two-lane roadway would provide adequate capacity through the project design year.

- ***Realign the project corridor.*** Due to roadway geometry and existing wetlands, three portions of the project were considered for alignment shifts to minimize wetland impacts. Upon investigation it was determined that realigning in either direction would not minimize wetland impacts substantially and would incur additional impacts such as relocations.
- ***Speed limit changes.*** Due in part to request from the public and the City of Red Lodge, potential speed limit changes were evaluated. The project corridor is located on level terrain, with the maximum grade of the roadway not exceeding 3 percent. The MDT design speed criterion for this type of roadway (rural minor arterial on level terrain) is 60 mph (105 kph). Design speed affects various design criteria, such as sight distance, length of deceleration/turn lanes, and width of clear zones. A lower design speed would reduce clear zone width, possibly reducing tree and brush clearing, and would reduce project costs with shorter centerline culverts across the roadway. A higher design speed would have the opposite effect. Further, there is a public perception that a lower design speed would improve safety conditions along the corridor. MDT conducted a speed study through the project area in 2003, yielding a recommendation to maintain the existing speed limits. Motorists have a tendency to drive at a speed that they feel comfortable with based on conscious and subconscious information they receive through their eyes, ears, and the road. MDT studies have indicated that simply lowering a speed limit is not likely to lower driving speeds. However, as development continues along the corridor, particularly in north Red Lodge, another speed study may yield the recommendation to reduce speed limits along parts of the project corridor.
- ***Transit Management.*** A transit management alternative was not carried forward due to the rural nature of the area and low traffic volume.

Chapter 3 Affected Environment, Impacts, & Mitigation

3.1 INTRODUCTION

This chapter describes the existing conditions and potential environmental impacts along the project corridor. The inventory and evaluation of the existing conditions, or affected environment, provides the necessary baseline from which to determine the impacts of the proposed project alternatives. This chapter uses this baseline to identify the positive and negative environmental impacts of the preferred and no-build alternatives presented in Chapter 2. Potential direct, indirect, and cumulative environmental impacts are presented, as well as avoidance, minimization, and mitigation measures that may be implemented.

3.2 ENVIRONMENTAL CONSIDERATIONS UNAFFECTED BY THE PROJECT

The following environmental considerations were reviewed and were found to be unaffected by the proposed project.

Air Quality — The purpose of this project is to improve the safety and operational characteristics of the roadway by making improvements to pavement, intersections, access, pedestrian/bicycle facilities, LOS, shoulders, ditch slopes, clear zones, and safety, as discussed in Chapter 2. This project would not result in any meaningful changes in traffic volumes, vehicle mix, location of the existing facility, or any other factor that would cause an increase in emissions impacts relative to the no-build alternative. As such, FHWA has determined that this project would generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special MSAT (Mobile Source Air Toxics) concerns. Consequently, this effort is exempt from analysis for MSATs.

Moreover, EPA (Environmental Protection Agency) regulations for vehicle engines and fuels will cause overall MSATs to decline significantly over the next 20 years. Even after accounting for a 64 percent increase in VMT (Vehicle Miles Traveled), FHWA predicts MSATs will decline in the range of 57 percent to 87 percent, from 2000 to 2020, based on regulations now in effect, even with a projected 64 percent increase in VMT. This will both reduce the background level of MSATs as well as the possibility of even minor MSAT emissions from this project.

Wild and Scenic Rivers — There are no Wild and Scenic Rivers located in the study area.

Coastal Barriers/Coastal Zone Impacts — The proposed project is not located in a coastal barrier or coastal zone area.

Energy — The proposed project would require the consumption of energy and resources that would not be used if US Highway 212 was not reconstructed. This is necessary in order to maintain a safe and efficient transportation corridor in the area. The benefits of the project to the traveling public would compensate for the energy lost during construction by improving the efficiency of travel along US Highway 212. Additionally, a minor amount of energy may be saved at roundabout intersections versus standard signalized intersections, as they do not require vehicles to idle but allow a continual flow of traffic.

Environmental Justice — US Census block group data (year 2000) were evaluated in regards to low-income populations in the project corridor. A “block group” reflects a sampling of households rather than all households. The block groups along the project corridor range from 4

to 18 percent low-income populations and are found throughout the project corridor. This compares to a 10.5 percent average for the state of Montana.

Census block data (also year 2000) were evaluated in regards to minority populations in the project area. The census “block” reflects data collected from all households. Montana’s population consists of 9.4 percent minority populations. Along the project corridor, there are three blocks that contain greater than 5 percent minority populations. They are located in Red Lodge (22 percent minority), between Roberts and Boyd (9 percent minority), and in Boyd (14 percent minority). The block in Red Lodge has a total population of nine with the minority population consisting of two American Indians/Alaska Natives. The block between Roberts and Boyd has a total population of 33 with the minority population consisting of one American Indian/Alaska Native and two individuals that are American Indian/Alaska Native and White. The block in Boyd consists of a total population of seven with the minority population consisting of one American Indian/Alaska Native.

Impacts to residences along the corridor would be mainly a result of right-of-way acquisition to meet standard MDT right-of-way widths, as discussed in Section 3.7. These impacts would be uniform along the project corridor and none of the identified low-income and/or minority populations are expected to bear the brunt of these impacts. Therefore, the proposed project is not expected to result in disproportional adverse effects on minority and/or low-income populations.

Economic Considerations — The proposed project is not expected to significantly affect tax revenues and public expenditures, employment opportunities, accessibility, and retail sales on the regional and/or local economy; the economic vitality of existing highway-related businesses; or established business districts. The location of development may be marginally affected by changes in speed and access. If access control is effective, there may be a somewhat greater tendency of businesses to locate near established settlements and access points. Improvements in time and safety of travel through the corridor should improve consumer access to wider markets, which may be expected to encourage greater competition for consumer and producer spending, with price and selection benefits for the area population. Given the relatively small scale of this project, however, these effects are expected to be marginal.

3.3 LAND USE

The proposed project is located in Carbon County, Montana. The project corridor consists of urban and rural roadway. The land uses surrounding the project corridor are primarily man-dominated systems that have been altered for residential, commercial, agricultural, transportation, and utility purposes.

The urban area of the project corridor is within Red Lodge. As previously discussed, the project corridor in Red Lodge consists of three distinct sub-segments. South of MT Highway 78, the corridor is within a mixed use, urbanized, downtown area with residential and commercial use. The second sub-segment, north of MT Highway 78, is adjacent to a developed area with mixed use that is predominantly commercial in nature and the third sub-segment is adjacent to an undeveloped/developing area.

The remainder of the project corridor is rural in nature, and adjacent land is primarily used for agriculture. The corridor also traverses the three unincorporated communities of Fox, Roberts, and Boyd; in these areas, residential and commercial properties abut the corridor. Also in the rural segments, there are three conservation easements owned by the Montana Land Reliance.

US Census data shows that the population in Carbon County grew faster than the national and state averages from 1990-2000. Since 2000, Red Lodge has experienced substantial population increases relative to the comparative samples. See *Table 3.1, Population Statistics*.

Table 3.1 Population Statistics		
Location	Population Growth 1990-2000	Population Growth 2000-2006
Red Lodge	11.2%	12.8%
Carbon County	18.2%	3.7%
Montana	12.9%	4.7%
United States	13.2%	6.4%

The reasons for population increases in this area are varied and complex, and likely include factors such as economic conditions, the nearby availability of amenities such as hiking, skiing, etc., and the aesthetics of the area. As the population in Carbon County, particularly in Red Lodge, increases, land use changes result. Information received from Red Lodge and Carbon County Planning staff indicates a number of new developments planned adjacent to or near to the project corridor, including five subdivisions, a hospital, and a bank in Red Lodge; one subdivision in Roberts; and two subdivisions between Roberts and Boyd. See *Table 3.2, Planned Development*.

Table 3.2 Planned Development		
Location	Name	Description
Red Lodge	City Lights Subdivision	9-lot subdivision in Country Club Estates on Lazy "M" Street
Red Lodge	Diamond C. Links Subdivision	138-lot subdivision on West Bench Road
Red Lodge	Woodlands Subdivision	76-unit subdivision near Rock Creek
Red Lodge	Luoma Annexation – Spires Subdivision	305-400 unit subdivision on 119 acres, on West Bench near MT Highway 307
Red Lodge	Remington Ranch Subdivision	170-unit subdivision along Remington Ranch Road
Red Lodge	Beartooth Hospital	New hospital, nursing home, assisted living facility, and medical offices southwest of Two Mile Bridge Road intersection
Red Lodge	Bank of Red Lodge	New bank northwest of 8 th Street intersection
Roberts	Merritt Village South Subdivision	22-unit subdivision in Roberts
Roberts to Boyd	Sapphire Springs Subdivision	47-lot subdivision on the west side of US Highway 212
Roberts to Boyd	Dot Calm Ranches Subdivision	159-unit subdivision southeast of Clear Creek Road

Both the City of Red Lodge and Carbon County have developed guidance intended to control growth and development patterns. Red Lodge adopted the Red Lodge Growth Policy in May 2001. The Red Lodge Growth Policy attempts to balance real estate market forces and the interests of the public by requiring that proposed developments on large vacant parcels within the City and areas around Red Lodge be reviewed and evaluated using a permit system, rather than through traditional zoning. In September 2003, Carbon County adopted the Carbon County

Growth Policy, which is applicable to the rural segments within the project corridor, including the unincorporated communities of Fox, Roberts, and Boyd. In May 2006, using the Red Lodge Growth Policy as guidance, Red Lodge adopted the City of Red Lodge Comprehensive Trails Plan. This Plan was adopted to satisfy one of the goals of the Red Lodge Growth Policy, which was to develop a trail system linking parks, residential areas, and open spaces.

Impacts to Land Use

Alternative A (No-Build): If no action were taken, the proposed project would not directly impact land use in the area. Population growth and development in the area would still be expected to occur even if the highway were not improved. However, Alternative A would not provide the necessary roadway improvements to accommodate these land use changes and would not be consistent with the Red Lodge or Carbon County Growth Policies or the Red Lodge Comprehensive Trails Plan.

Alternative B (Preferred): The Preferred Alternative would be consistent with the Red Lodge and Carbon County Growth Policies, as well as the Red Lodge Comprehensive Trails Plan. It would accommodate the land use changes near the project corridor, but would not drive these changes. Some new right-of-way would be needed along the corridor for roadway improvements and to achieve the standard MDT right-of-way width for the facility type; lands in various uses, including agricultural, commercial, residential, and conservation easements, would be converted from their existing use to part of the transportation corridor. However, the highway has been in place for many years, and the Preferred Alternative would improve the roadway on its existing alignment. The Preferred Alternative is not expected to induce additional traffic since it would not provide additional capacity (aside from passing lanes at three locations in the rural segments) nor is it expected to change growth patterns in the area.

During the EA scoping process, the Red Lodge City Planner expressed verbal concerns about potential indirect land use and development impacts that the project may have on the undeveloped area in north Red Lodge. A preliminary project proposal was to use a TWLTL for the length of the project corridor in Red Lodge. The purpose of the TWLTL would have been to provide for access to all developed and developing properties adjacent to the roadway while reducing differential speed conflicts between turning vehicles and through-traveling vehicles. However, the Red Lodge City Planner expressed concern that the use of a TWLTL may encourage commercial strip development in northern Red Lodge, which was not the type of land use development the City wished to see. MDT worked cooperatively with Red Lodge to develop an Access Management Plan for this area, which has been incorporated into the Preferred Alternative (as discussed in Chapter 2). The Preferred Alternative has been modified such that a TWLTL is no longer proposed for the undeveloped area in north Red Lodge, and indirect impacts to land use and development are not anticipated.

Mitigation for Land Use Impacts

No adverse impacts to land use are anticipated as a result of the Preferred Alternative; therefore, no mitigation is required.

3.4 FARMLAND

The Farmland Protection Policy Act of 1981 (7 U.S.C. 4201 et seq.) provides protection to prime and unique farmlands. Prime farmlands are those that have the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is

also available for these uses (not developed land or water). It has the soil quality, growing season, and moisture oversupply needed to economically produce sustained high yields of crops when treated and managed, including water management (irrigation), according to acceptable farming methods. Unique farmland is land that is used for production of specific high value food, feed, and fiber crops. Section 658.5 of the Farmland Protection Policy Act provides criteria for federal agencies to identify and take into account the adverse effects of federal programs on the protection of farmland. Federal agencies are to consider alternative actions, as appropriate, that could lessen adverse effects; and to assure that such federal programs, to the extent practicable, are compatible with State, unit of local government, and private programs and policies to protect farmland.

Agricultural lands surround the rural segments of the project corridor. Portions of these segments are located within prime and statewide important farmland.

Impacts to Farmland

Alternative A (No-Build): If no action were taken, there would be no impacts to prime, unique, or statewide important farmland in the project area.

Alternative B (Preferred): The Preferred Alternative would impact approximately 275.8 acres (111.6 hectares) of farmland. Of this, approximately 89.6 acres (36.3 hectares) are considered prime farmland¹ and 48.9 acres (19.8 hectares) are considered to be of statewide importance. Farmland Conversion Impact Rating form CPA-106 has been completed in cooperation with the NRCS (Natural Resources Conservation Service). The CPA-106 form computation resulted in a total point value of 133 out of a possible score of 260. Section 658.4(c)(2) of the Farmland Protection Policy Act states that sites receiving a total score of less than 160 on the Form need not be given further consideration for protection. *See Appendix B, NRCS Coordination & CPA-106 Forms.*

Mitigation for Farmland Impacts

As the CPA-106 score was less than 160, no mitigation is required for impacts to farmland.

3.5 TRANSPORTATION SYSTEM

The following discussion addresses components of the transportation system within the project corridor: traffic, access, safety, and pedestrian and bicycle facilities.

3.5.1 Traffic

MDT provided traffic volume estimates for project corridor. The estimates were for the current year (2007), the approximate year that the proposed improvement would be open to traffic (2010), and the project design year (2030). Due to development along the corridor, traffic volumes are expected to increase approximately 158 percent in the rural segments and 220 percent in Red Lodge by 2030. *See Table 3.3, Average Annual Daily Traffic (AADT).*

¹ The estimated impacts to prime farmland includes impacts to land designated "prime-if-irrigated".

Table 3.3 Average Annual Daily Traffic (AADT)				
Location	AADT			Percent Increase
	2007	2010	2030	
8 th Street to MT Highway 78	5,440	6,030	12,010	220
MT Highway 78 to Two Mile Bridge Road	2,980	3,300	6,570	220
Two Mile Bridge Road to Boyd	2,840	3,010	4,480	158

The LOS was analyzed for the project segments and key intersections². The analysis was completed for the no-build alternative and the Preferred Alternative for years 2007, 2010, and 2030. The desired LOS is B for rural areas and C for urban areas; this represents stable operations.

Currently, all project segments and key intersections are functioning at an acceptable LOS, with the exception of the northbound traffic lane in the rural segment between Roberts and Boyd.

Impacts to Traffic

Alternative A (No-Build): Under the no-build alternative, the intersections of 8th Street and MT Highway 78 would not function with an acceptable LOS by the project design year. The 8th Street intersection would be expected to operate at a LOS E, and the MT Highway 78 intersection would be expected to operate at a LOS F by 2030. Traffic flow in the northbound lane between Roberts and Boyd, which is currently functioning at a LOS C, would not be improved. The southbound lane in the rural segment between Red Lodge and Roberts is anticipated to deteriorate to LOS C by 2010 if no improvements are made.

Alternative B (Preferred): Under the Preferred Alternative, all of the segments and key intersections would be expected to operate at acceptable LOS (B or greater in rural segments and C or greater in urban segments) through 2030.

Mitigation for Traffic Impacts

The Preferred Alternative would be consistent with MDT design guidelines for a minimum of LOS B for rural segments and LOS C for urban segments; therefore no mitigation of traffic impacts would be required.

3.5.2 Access

It is important to balance the competing needs of access (to adjacent properties) and progression (of through traffic) along a roadway corridor. The existing corridor provides one travel lane in each direction and narrow roadway shoulders, with access to adjacent properties provided directly from US Highway 212. In other words, vehicles wishing to turn and those wishing to go straight are sharing the same narrow roadway. In areas along the corridor with urban development (numerous properties requiring access in close proximity to each other), particularly Red Lodge and Roberts, this creates the potential for disorderly traffic flow and unsafe conditions. The project area is expected to continue to experience population growth and

² More detailed information can be found in the Traffic Report Technical Memorandum dated October 16, 2007, which is available for review from MDT.

associated land development and traffic increases, which will result in a higher demand for both access and progression. The City of Red Lodge has already noted that there is inadequate public parking to support the downtown arts and crafts community, including the Arts Guild and Carnegie Library.

Safe and efficient access is particularly important for emergency response vehicles at the Red Lodge Fire Station and proposed Beartooth Hospital, both located adjacent to the project corridor in Red Lodge.

At the request of the City of Red Lodge, MDT and the City developed an Access Management Plan for the project corridor from MT Highway 78 to Two Mile Bridge Road.

Impacts to Access

Alternative A (No-Build): The no-build alternative would not be consistent with the Access Management Plan supported by the Red Lodge City Council in Resolution No. 3228. If no action were taken, the conflicting needs of drivers wishing to access adjacent properties and those wishing to progress through the corridor would not be addressed. In the short term, this would perpetuate the ingress/egress conditions that are experienced today in areas of Red Lodge and Roberts. In the longer term, conflicts between turning vehicles and through-traveling vehicles may be expected to develop in other areas adjacent to the corridor that become more urbanized (such as northern Red Lodge). Access to the Red Lodge Fire Station and proposed Beartooth Hospital could be compromised as traffic congestion increases.

Alternative B (Preferred): The Preferred Alternative would improve the ability of the roadway to provide for both access and progression. In Red Lodge, the Preferred Alternative would be consistent with the Access Management Plan, developed at the request of the City of Red Lodge, which would manage access between MT Highway 78 and Two Mile Bridge Road. Reasonable access would be maintained for adjacent properties throughout the project area while minimizing traffic operational conflicts. Additional downtown parking would be added along Oakes Avenue to serve the downtown Arts Guild and Carnegie Library. Access to the Red Lodge Fire Station would be enhanced with a roundabout at MT Highway 78, which would minimize long vehicle queues in front of the Fire Station driveways. Access to the new Beartooth Hospital would also be accommodated, allowing for efficient emergency vehicle access approaching the hospital from both the north and south directions on US Highway 212. In Roberts, the addition of a TWLTL would improve traffic flow and safety conditions for those wishing to access adjacent properties or progress along the corridor. Proposed modifications at key intersections, including Cooney Dam Road in Roberts and Boyd, would also result in improved access for adjacent properties.

Mitigation for Access Impacts

The Preferred Alternative would maintain reasonable access for adjacent property owners while managing access and vehicular progression; therefore, no mitigation is required.

3.5.3 Safety

MDT is concerned about traffic safety along the project corridor. Between January 1, 1992 and December 31, 2006 a total of 441 crashes were recorded; there were 132 injuries and 10 fatalities. See *Table 3.4, Crash Summary*. The project corridor as a whole has a higher than average crash history; with an all-vehicle crash rate of 1.93 crashes/million vehicle miles,

compared to the statewide average of 1.40 crashes/million vehicle miles. There are numerous intersections with geometric deficiencies, including a lack of turn lanes, undefined access within the functional area of the intersection, and highly skewed intersections. The public has also voiced safety concerns with the narrow shoulder widths. The roadway ditches are shallow, narrow, and steep; resulting in a lack of storage volume for rain or snow following precipitation events and increasing safety concerns for vehicles that drive off the road. Thick brush and trees within the clear zone obscure visibility of approaching wildlife as well as create safety concerns for errant vehicles.

Table 3.4 Crash Summary	
Type of Crash	Number of Crashes
Involved "wild" animals	153
Rear-end	29
Sideswipe	18
Involved left turns	8
Involved right angles	22
Head on	5
Other	55
Not coded	151

In Red Lodge, City officials have raised concerns about safety and accessibility at the Fire Station. The Beartooth Hospital is also proposed to be constructed along the project corridor. Additional public and City comments have been received concerning a lack of pedestrian and bicycle facilities in Red Lodge.

In Roberts, many social activities center on Roberts School. The School District and general public have raised safety concerns stemming from the skewed and offset intersection of Cooney Dam Road and East Maple Street and uncontrolled access at the Y-Stop. The School District has requested installation of guardrail adjacent to the school property to provide improved protection of the children using the school playground. The School District has also requested bus turnarounds at two locations to facilitate bus turning movements and improve traffic safety conditions. Two years ago, the community of Roberts installed new sidewalks east of and parallel to the project corridor, to provide a safe location for pedestrians traveling to and from school off of the highway.

Between Roberts and Boyd, the intersection of the rest area accesses and Clear Creek Road form an offset intersection. Additionally, on Cooney Dam Road in Boyd, westbound traffic from the north and south forks must merge, creating a conflict point.

Impacts to Safety

Alternative A (No-Build): The no-build alternative would leave the existing road in its present configuration. With no improvements, the number of crashes and existing crash rates are anticipated to increase as traffic continues to increase. Public concerns about safety conditions, particularly in the urban areas of Red Lodge and Roberts, would not be addressed. Increasing congestion at the intersection of MT Highway 78 adjacent to the Red Lodge Fire Station may impact emergency vehicle response time.

Alternative B (Preferred): The Preferred Alternative would provide numerous safety improvements along the project corridor. These include intersection realignments to eliminate skewed and offset intersections, the addition of turn lanes where needed, access management in Red Lodge, wider shoulders, flatter ditch slopes, clearing of thick brush and trees within the clear zone, provision of pedestrian and bicycle facilities in Red Lodge and Roberts, and provision of bus turnarounds for the Roberts school buses. These improvements are anticipated to result in a reduction in the number and severity of crashes as well as crash rates. The proposed roundabout at the intersection of MT Highway 78 adjacent to the Red Lodge Fire Station would reduce traffic congestion impacts on emergency vehicle response time. (Please note that animal-vehicle crashes are discussed further in Section 3.11.5, Animal-Vehicle Collisions.)

Mitigation for Safety Impacts

The Preferred Alternative would be consistent with MDT design guidelines for roadway safety features, therefore no mitigation of safety features are required.

3.5.4 Pedestrian/Bicycle Facilities

The Bicycle Transportation and Pedestrian Walkways provisions of Section 217 of Title 23 U.S.C. was amended by the 2005 SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users) Section 1954. This states that bicycle transportation facilities and pedestrian walkways shall be considered, where appropriate, in conjunction with all new construction and reconstruction of transportation facilities, except where bicycle and pedestrian use are not permitted; and that transportation plans and projects shall provide due consideration for safety and contiguous routes for bicyclists and pedestrians.

Currently, there are no pedestrian and bicyclist facilities along the project corridor. The existing roadway shoulders are approximately 2 feet (0.6 meters) wide, which is below the AASHTO recommended minimum usable shoulder width (i.e., clear of rumble strips) of 4 feet (1.2 meters) for accommodating bicyclists or pedestrians along the road.

US Highway 212 is used by pedestrians and bicyclists in Red Lodge between 8th Street and Two Mile Bridge Road. The City of Red Lodge developed a trail plan in May 2006, which identified the need for sidewalk and shared bike/ped path facilities along US Highway 212 within Red Lodge. In addition, numerous public comments were received requesting pedestrian and bicycle facilities in Red Lodge. See *Figure 3-1, City of Red Lodge Existing and Planned Trails*.

In 2005, Roberts used CTEP (Community Transportation Enhancement Program) funding to construct sidewalks one-block east and parallel to US Highway 212 on First Street. The purpose of the project was to improve safety and accessibility for children walking to school by keeping them safely off of US Highway 212.

Impacts to Pedestrian/Bicycle Facilities

Alternative A (No-Build): The no-build alternative would leave the existing road in its present configuration. No additional provisions for accommodating pedestrians and bicycles would be made. The majority of the roadway would essentially remain inaccessible to pedestrians and bicycles within the communities of Red Lodge and Roberts. The rural portions of the roadway would continue to have inadequate roadway shoulders for accommodating rural pedestrians and bicyclists along the roadway.

Alternative B (Preferred): The Preferred Alternative would be consistent with the local pedestrian/bicycle plan in Red Lodge by providing a shared bike/ped path from MT Highway 78 to Two Mile Bridge Road. The Preferred Alternative would also provide ADA accessible pedestrian facilities within the corporate limits of Red Lodge. *See Figure 3-2, Preferred Alternative Consistency with City of Red Lodge Comprehensive Trails Plan.* Additional ADA accessible pedestrian facilities and improved school crossings would be provided in Roberts. *See Figure 3-3, Roberts Pedestrian/Bicycle Facilities.* The rural areas would include an eight-foot wide roadway shoulder to accommodate pedestrians and bicyclists along the roadway.

Mitigation for Pedestrian/Bicycle Facility Impacts

The Preferred Alternative would provide for planned and unmet pedestrian and bicycle accommodations; therefore, no mitigation is required.

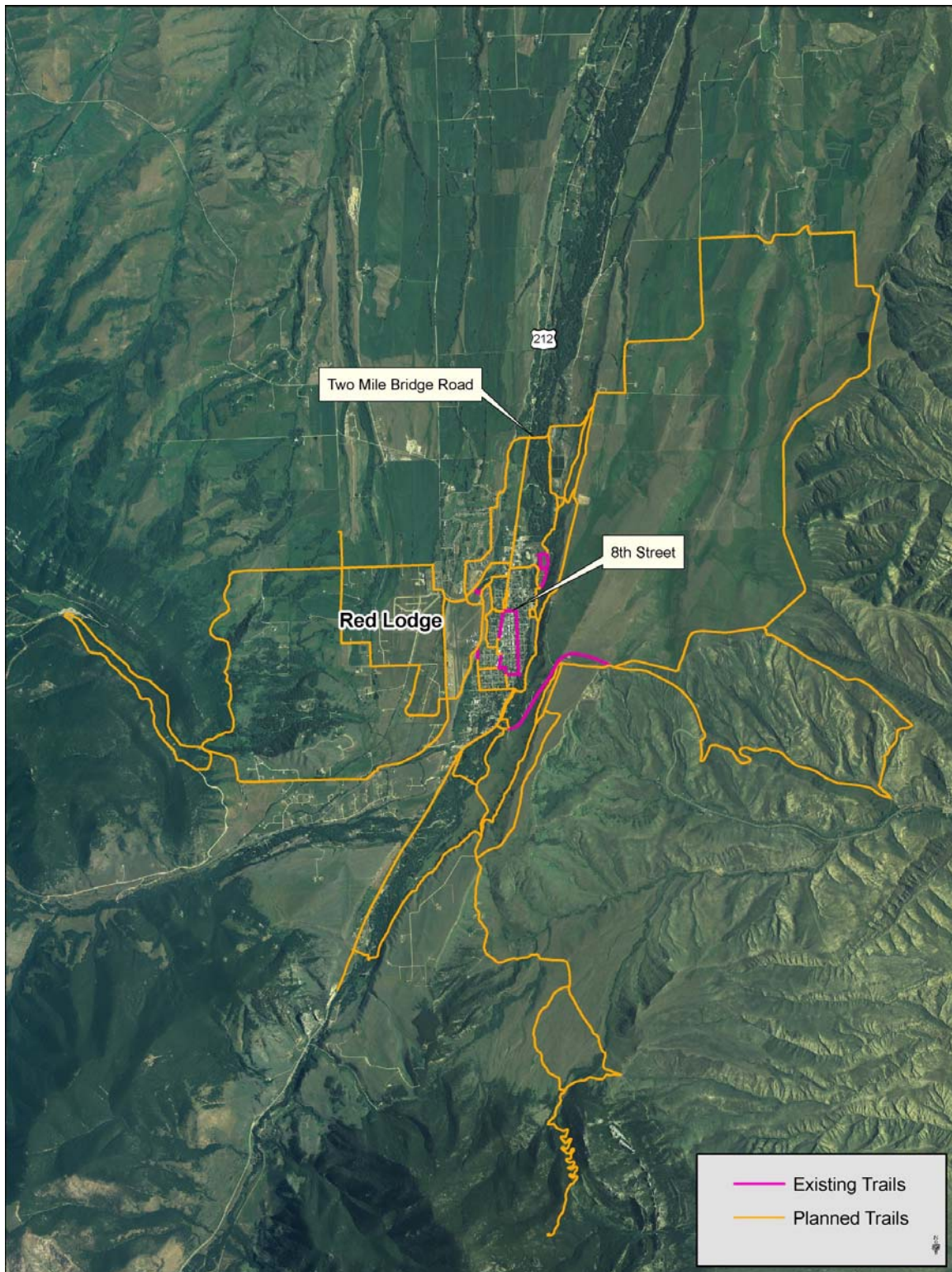


Figure 3-1, City of Red Lodge Existing and Planned Trails

**Note: The trails shown in this figure are based on the City of Red Lodge Comprehensive Trails Plan (2006).*

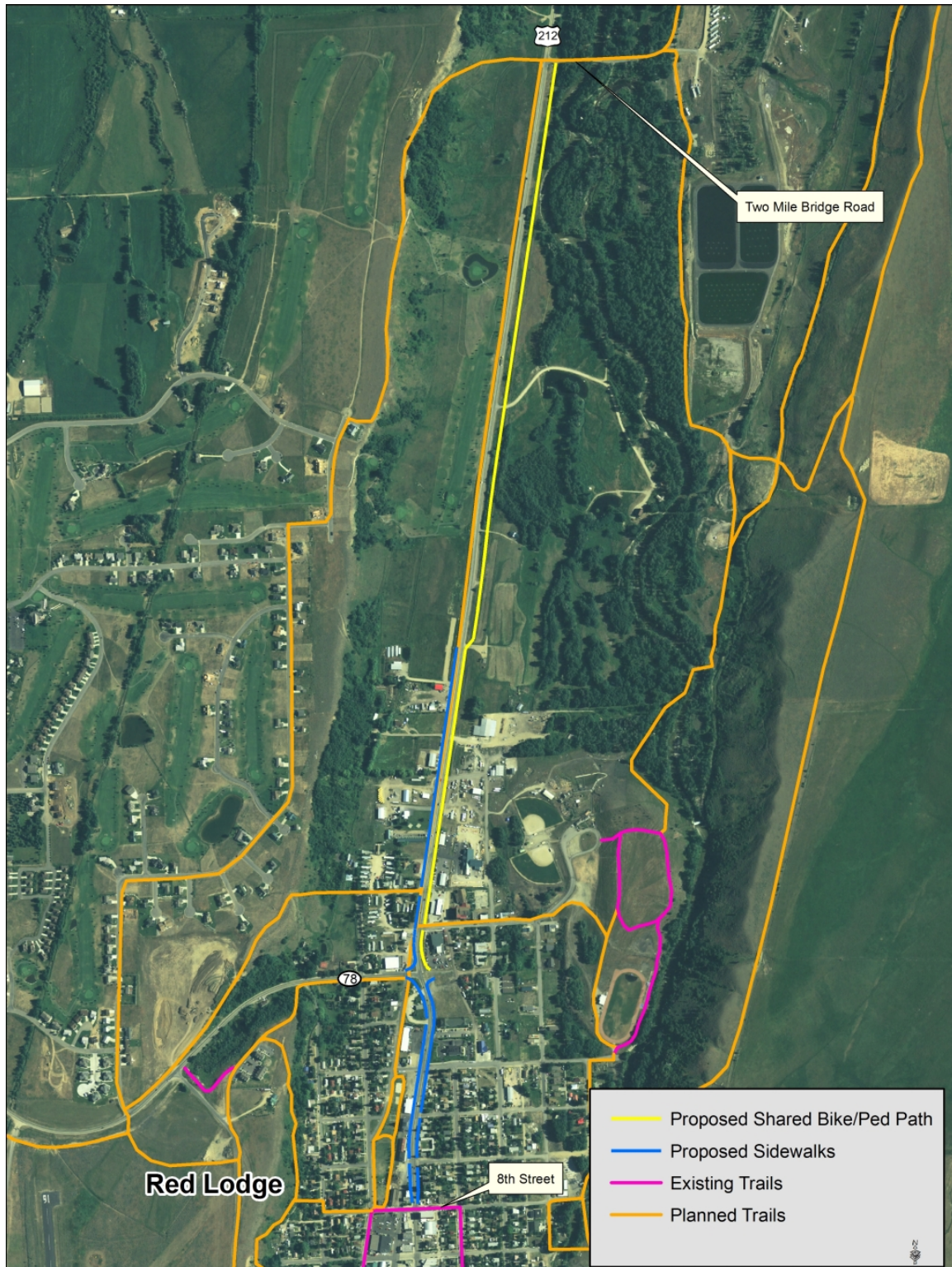


Figure 3-2, Preferred Alternative Consistency with City of Red Lodge Comprehensive Trails Plan

**Note: This is a conceptual figure based on the preliminary (approximately 30 percent) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization, and mitigation strategies are evaluated, potential impacts may change slightly.*



Figure 3-3, Roberts Pedestrian/Bicycle Facilities

**Note: This is a conceptual figure based on the preliminary (approximately 30 percent) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization, and mitigation strategies are evaluated, potential impacts may change slightly.*

3.6 TRAFFIC NOISE

A traffic noise analysis was conducted to determine the existing traffic noise levels and the projected future traffic noise levels at proposed passing lane locations in the rural segments of the project corridor: Red Lodge to Roberts and Roberts to Boyd. The noise analysis did not include the urban segments of the project corridor (Red Lodge and Roberts), since no additional passing lanes were proposed within those segments.

Two-mile long passing zones (Passing Zones 1 and 3) were analyzed between Red Lodge and Roberts and between Roberts and Boyd to allow for flexibility during the design phase. However, the final length of each passing lane would be approximately one-mile. Additionally, Passing Zone 2 was analyzed between Roberts and Boyd for the northbound passing lane. Due to geometric constraints, a two-mile passing zone could not be analyzed in this location; instead a one-mile passing zone was evaluated. These passing zones are located at the following areas:

- Red Lodge to Roberts—Passing Zone 1 was identified as a two-mile segment north of Two Mile Bridge Road on the east side of the roadway
- Roberts to Boyd—Passing Zone 2 was identified as a one-mile segment north of Roberts on the east side of the roadway
- Roberts to Boyd—Passing Zone 3 was identified as a two-mile segment south of Boyd on the west side of the roadway

See Figure 3-4, Passing Zones.

The analysis was conducted in accordance with 23 CFR Part 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise, and MDT's Traffic Noise Analysis and Abatement: Policy and Procedure Manual (2001).

Traffic noise impacts can occur under two separate conditions: (1) when noise levels are unacceptably high (absolute level); or (2) when noise levels would substantially increase by the project design year. MDT thresholds for absolute noise levels vary with land use, as *shown in Table 3.5, Noise Abatement Criteria, Exterior Noise Levels*. The MDT threshold for a substantial noise increase is 13 dB.

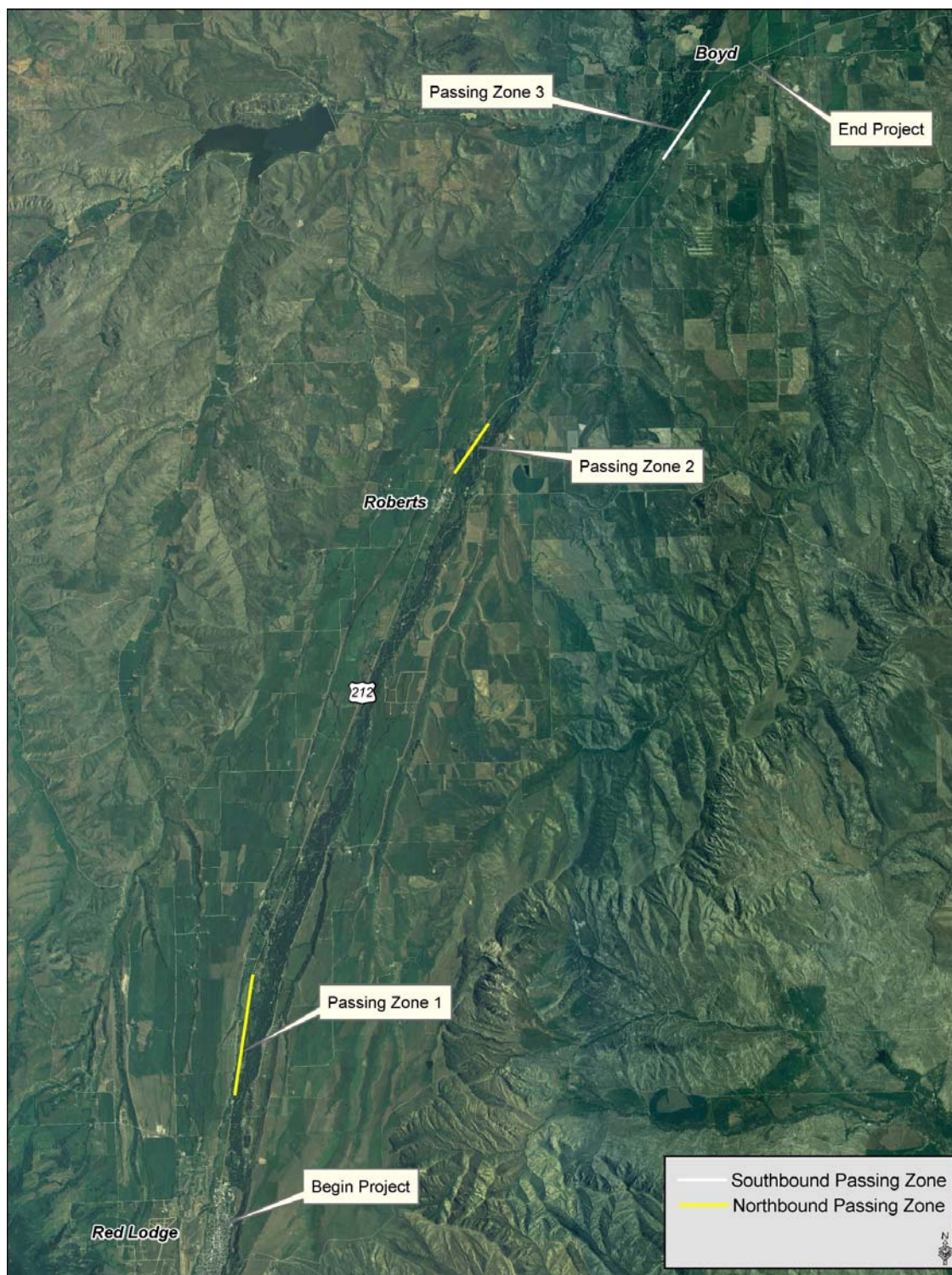


Figure 3-4, Passing Zones

**Note: This is a conceptual figure based on the preliminary (approximately 30 percent) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization, and mitigation strategies are evaluated, potential impacts may change slightly.*

Table 3.5 Noise Abatement Criteria, Exterior Noise Levels			
Land Use Category	Description	Absolute Level Threshold (dB)	Found in Project Area
A	Lands on which serenity and quiet are of extraordinary significance. These lands serve an important public need and the preservation of these qualities is essential if the area is to continue to serve its intended purpose.	56	No
B	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals	66	Yes
C	Developed lands, properties, or activities not included in Categories A or B above	71	Yes
D	Undeveloped lands	—	Yes

Currently, the majority of the land adjacent to the passing zones is undeveloped; however, there is some residential and commercial development.

Traffic Noise Impacts

Alternative A (No-Build): Currently, one property is at MDT's noise threshold, meaning it is already experiencing noise impacts. Traffic is expected to increase over time due to increased development in the area. By 2030, traffic noise would increase by approximately 2 dB. This has the potential to result in noise levels approximately at, or slightly above, the MDT's noise threshold (65 dB) at five residential properties, including the property currently experiencing noise impacts. See *Table 3.6, Existing and Future Noise Levels for Impacted Properties*.

Table 3.6 Existing and Future Noise Levels for Impacted Properties				
Location	Residence	Location	Existing Noise Levels (dB)	2030 Noise Levels (dB)
Red Lodge to Roberts	1	109°14' 20.833" N / 45° 13' 24.669" W ³	64	66
	2	7242 Highway 212 Roberts, MT	64	66
	3	7367 Highway 212 Roberts, MT	64	66
	4	#4 Broken Spoke Roberts, MT	66	68
Roberts to Boyd	5	109° 4' 57.41" N / 45° 26' 46.807" W	64	66

Alternative B (Preferred): Under the Preferred Alternative, the five residential properties, as identified in Table 3.6, would potentially experience 2030 noise levels similar to the no-build alternative.

³ Latitude and longitude was provided for properties that did not have a designated physical address.

Mitigation for Traffic Noise Impacts

Under both alternatives, five residential properties would experience noise levels at or slightly above the absolute threshold by 2030. Potential mitigation measures could include items such as speed limit reductions, horizontal or vertical alignment shifts, construction of noise barriers, or property acquisition for buffer zones. However, noise mitigating measures such as these are not reasonable and feasible at this time. MDT will provide Carbon County a Traffic Noise Report that includes recommended setbacks for future development along the corridor to assist the County in their efforts of minimizing potential noise impacts.

3.7 RIGHT-OF-WAY AND RELOCATIONS

The Preferred Alternative may result in relocations and property acquisition. However, the “Uniform Act”, or Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. 4601 et seq.), and amendments, provides protections and assistance for people affected by such federally funded projects.

The location and width of existing right-of-way and easements varies greatly throughout the project corridor. Along the corridor there are approximately 148.7 acres (60.2 hectares) of MDT right-of-way. Additionally, there are 45.6 acres (18.5 hectares) of easements along the corridor that are being used by MDT for roadway purposes.

Right-of-Way and Relocation Impacts

Alternative A (No-Build): If no action were taken, right-of-way would not need to be acquired, and there would be no property acquisitions and/or relocations.

Alternative B (Preferred): The Preferred Alternative would require the acquisition of right-of-way in fee to achieve the standard right-of-way width of 80 feet (25 meters). In addition, the existing MDT easements would be converted to fee right-of-way. Alternative B would require the acquisition of approximately 317.2 acres (128.4 hectares) of right-of-way, including the conversion of existing easements currently being used for roadway purposes.

Additionally, the Preferred Alternative may require the acquisition and/or relocation of structures on up to nine properties, including six dwellings, two outbuildings, and one commercial building. This analysis is based on preliminary (approximately 30 percent) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization, and mitigation strategies are evaluated, potential impacts may change slightly.

Mitigation for Right-of-Way and Relocation Impacts

MDT will comply with the “Uniform Act”, or Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. 4601 et seq.), and amendments. MDT will also attempt to meet individually with affected property owners to discuss potential impacts. MDT will make reasonable efforts to avoid and/or minimize impacts to potentially affected property owners.

3.8 WATER RESOURCES/QUALITY

The Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 (33 U.S.C. 1251 et seq.), provides the authority to establish water quality standards, control discharge into surface and subsurface waters, develop waste treatment management plans and practices, and issue permits for discharges (Section 402) and for dredged or fill material (Section 404).

3.8.1 Surface Water

There are several permanent or semi-permanent water bodies along the project corridor. They are as follows:

- *Rock Creek*: Rock Creek parallels US Highway 212 over the entire project length, at distances ranging from 0 (at the crossing) to 1.5 miles (0.8 kilometers). South of the crossing, Rock Creek is located east of the highway. North of the crossing, the creek is on the west side of the highway. Rock Creek is listed on Montana's 2006 list of "Impaired and Threatened Water Bodies in Need of Water Quality Restoration." Probable causes of impairment include low flow alteration, while probable sources of impairment include flow alteration from water diversions and irrigated crop production.
- *Stanley Creek*: US Highway 212 crosses Stanley Creek along the proposed project corridor. Downstream of the crossing, Stanley Creek becomes the Carbonado Ditch. Carbonado Ditch terminates several miles below this crossing, prior to reaching Rock Creek. Stanley Creek is not listed on Montana's 2006 list of "Impaired and Threatened Water Bodies in Need of Water Quality Restoration."
- *Irrigation Ditches*: Numerous irrigation ditches cross the highway through culverts. These ditches are sourced by Rock Creek; however, most terminate before returning to Rock Creek or other streams.

In addition, there are approximately 26 intermittent or ephemeral surface water crossings along the project corridor.

Impacts to Surface Water

Alternative A (No-Build): If no action were taken, there would be no new impacts to surface water.

Alternative B (Preferred): Impacts to water quality may result from culvert replacement or extension; ditch realignment; dredge/fill activities in wetlands; the relocation of irrigation ditches outside of the proposed right-of-way, as discussed further in Section 3.8.2; and new storm water outfall locations at Rock Creek.

Mitigation for Surface Water Impacts

Impacts to surface water would be minimized with the implementation of BMPs (Best Management Practices) during construction. Construction activities would be in compliance with applicable permits and regulations, specifically Section 402 and 404 of the CWA (Clean Water Act) and the Montana Stream Protection Act. Mitigation measures for impacts to irrigation

facilities and wetlands are discussed further in Section 3.8.2, Irrigation Facilities, and Section 3.10, Wetlands.

3.8.2 Irrigation Facilities

An Irrigation Report was prepared for the Red Lodge North corridor (Kadmas, Lee & Jackson, Inc., 2003). The following information was summarized from that report.

Twenty-seven irrigation ditches cross US Highway 212 throughout the corridor. Nineteen of the ditches have decreed irrigation rights, while the other eight have appropriated rights, which are not controlled by the water commissioner. Consolidated Ditch, Finn Ditch, and Highline Ditch are incorporated ditches. (Please note that the historic nature of the irrigation ditches are discussed further in Chapter 4)

Rock Creek is the source for all of the irrigation ditches within the project. Two drainages are also used as irrigation sources, Stanley Creek and an unnamed drainage opposite of the rest area near Clear Creek Road. According to United States Geological Survey streamflow data, the average annual peak flow rate of Rock Creek four miles south of Red Lodge is 1,285 cfs (cubic feet per second), while the average annual peak flow rate of Rock Creek at Joliet is 1,343 cfs. During the peak of irrigation season, water right holders may draw as much as 450 cfs from Rock Creek.

Impacts to Irrigation Facilities

Alternative A (No-Build): If no action were taken, irrigation facilities would not be impacted.

Alternative B (Preferred): The Preferred Alternative would relocate irrigation ditches as necessary in consultation with owners to minimize impacts. As appropriate, removal of ditches would be done during construction of the new roadway and would include removal of concrete head gates, pipes, and structures. New facilities would be located outside the proposed right-of-way. Additionally, the water rights holder at Mullaney Spring has expressed concern over potential impacts to the spring, which irrigates his tree farm. Preliminary assessments show that Mullaney Spring may be impacted; however, this will be further evaluated during project design. See Table 3.7, *Impacts to Irrigation Facilities*.

Table 3.7 Impacts to Irrigation Facilities			
Irrigation Ditch	Location	Description	Impact
Brewery Ditch	Red Lodge	Serves 4 users and has a flow of 1.99 cfs; irrigates approximately 23.3 acres (9.4 hectares) of hay land.	No impacts anticipated.
Vincent Ditch	Red Lodge to Roberts	Serves 3 users and has a flow of 2.13 cfs; irrigates approximately 92.7 acres (37.5 hectares) of hay land. Part of the ditch flows inside the west fence line.	Section along west fence line may be moved beyond right-of-way.

Continued...

Table 3.7
Impacts to Irrigation Facilities

Irrigation Ditch	Location	Description	Impact
Taylor Ditch	Red Lodge to Roberts	The Rock Creek Water Users' Association regulates this ditch. Irrigation water is purchased from the Rock Creek Drainage. Water is released from the Cooney Reservoir to match what was taken from the upper Rock Creek. Part of the ditch flows inside the east fence line.	Section along east fence line may be moved beyond right-of-way.
Joki Ditch	Red Lodge to Roberts	Serves 14 users and has a flow of 8.44 cfs; irrigates approximately 397.3 acres (160.9 hectares) of hay land.	No impacts anticipated.
Consolidated Ditch Company	Red Lodge to Roberts	Serves 27 users and the initial capacity of the main canal is 76.79 cfs. In 1965 it served approximately 2,171 acres (879.3 hectares) of hay land with the potential to irrigate 59 additional acres (23.9 hectares).	No impacts anticipated.
Wallis Ditch	Red Lodge to Roberts	Serves 19 users and has a flow of 3.70 cfs; irrigates approximately 83.2 acres (33.7 hectares) of hay land. Part of the ditch flows just outside the west fence line.	Section flowing just beyond west fence line may be moved beyond right-of-way.
Kivikangas Ditch	Red Lodge to Roberts	Serves 8 users and has a flow of 16.75 cfs; irrigates approximately 661.1 acres (267.7 hectares) of hay land.	No impacts anticipated.
Curry Ditch	Red Lodge to Roberts	Serves 2 users and has a flow of 0.35 cfs; irrigates approximately 22.2 acres (9.0 hectares) of hay land.	No impacts anticipated.
Price Ditch	Red Lodge to Roberts	Serves 4 users and has a flow of 8.38 cfs; irrigates approximately 352.5 acres (142.8 hectares) of hay land. Part of the ditch flows near each fence line.	Sections of the ditch flowing near the fence lines may be moved beyond right-of-way.
Hunter-Russet Ditch	Red Lodge to Roberts	Serves 7 users and has a flow of 18.99 cfs; irrigates approximately 748.9 acres (303.3 hectares) of hay land. Part of the ditch flows just outside the west fence line.	Section of ditch just outside west fence line may be moved beyond right-of-way.
Price Ditch (Lower Branch)	Red Lodge to Roberts	Lower branch serves one user and has a flow of 1.19 cfs; irrigates approximately 31.49 acres (12.8 hectares) of hay land.	No impacts anticipated.
Finn Ditch Company	Red Lodge to Roberts	Serves 15 users and capacity of the main ditch is 83.53 cfs with a length of 9 miles (14.5 kilometers); irrigates approximately 2,682.3 acres (1,086.3 hectares) of hay land.	No impacts anticipated.
McKenzie-Allen Ditch	Red Lodge to Roberts	Serves 5 users and has a flow of 16.58 cfs; irrigates approximately 777.1 acres (314.7 hectares) of hay land.	No impacts anticipated.

Continued...

Table 3.7
Impacts to Irrigation Facilities

Irrigation Ditch	Location	Description	Impact
Mullaney Spring	Red Lodge to Roberts	Patrick Mullaney has water rights to a spring that surfaces in the highway ditch. This spring serves one user and has a flow of 0.14 cfs. It serves 3.7 acres (1.5 hectares) of a tree farm. An underdrain system is currently in place. This water flows through a gravel pit that is 147.6 feet (45 meters) long by 49.2 feet (15 meters) wide by 3.9 feet (1.2 meters) deep.	No impacts anticipated.
Hill-Hopkins Ditch	Red Lodge to Roberts	Serves 2 users and has a flow of 7.25 cfs; irrigates approximately 290 acres (117.5 hectares) of hay land.	No impacts anticipated.
Barry-Pitts Ditch	Red Lodge to Roberts	Serves 4 users and has a flow of 6.86 cfs; irrigates approximately 310 acres (125.6 hectares) of hay land.	No impacts anticipated.
Hill Brothers Ditch	Red Lodge to Roberts	Serves 6 users and has a flow of 11.26 cfs; irrigates approximately 440 acres (178.2 hectares) of hay land.	No impacts anticipated.
Rule-Thompson (Glantz-Schanck) Ditch Upper Branch	Roberts	Serves 2 users and has a flow of 6.38 cfs; irrigates approximately 600 acres (243 hectares) of hay land.	No impacts anticipated.
Rule-Thompson (Glantz-Schanck) Ditch Lower Branch	Roberts	Serves 5 users and has a flow of 12.04 cfs; irrigates approximately 885 acres (358.4 hectares) of hay land.	No impacts anticipated.
Duncan-Aiken Ditch	Roberts to Boyd	Serves 7 users and has a flow of 8.36 cfs; irrigates approximately 492 acres (199.3 hectares) of hay land.	No impacts anticipated.
Hunt Ditch (Upper and Lower Branches)	Roberts to Boyd	Serves one user and has a flow of 7.00 cfs; irrigates approximately 324 acres (131.2 hectares) of hay land. Water flows in the right-of-way east of both highway culverts.	Channel changes may be required at both locations.
Highline Ditch	Roberts to Boyd	Serves 14 users and has a flow of 32.51 cfs; irrigates approximately 1,219.4 acres (493.9 hectares) of hay land. Part of the ditch flows inside the east right-of-way.	Section may be moved beyond right-of-way.
Rooney Ditch	Roberts to Boyd	Serves 5 users and has a flow of 10.83 cfs; irrigates approximately 558 acres (226 hectares) of hay land. Part of the ditch flows inside the east right-of-way.	Section may be moved beyond right-of-way.
Drake Ditch	Roberts to Boyd	Serves 4 users and has a flow of 11.51 cfs; irrigates approximately 386.5 acres (156.5 hectares) of hay land. Part of the ditch flows inside the east right-of-way and parts flow just inside of the west fence line.	Section may be moved beyond right-of-way.

Continued...

Table 3.7
Impacts to Irrigation Facilities

Irrigation Ditch	Location	Description	Impact
Stanley Creek	Roberts to Boyd	This crossing is a natural drainage basin that people use for irrigation. This ditch serves ten users and has a flow of 14.92 cfs. It irrigates 472.2 acres of hay land. Part of the drainage channel flows inside the east right-of-way.	Section may be moved beyond right-of-way.
Ward Ditch	Roberts to Boyd	Serves 4 users and has a flow of 4.40 cfs; irrigates approximately 93.0 acres (37.7 hectares) of hay land. There are two parallel approaches west of the crossing that may be combined into one approach.	If approaches are combined, changes to the channel may be necessary.
Beerwart Ditch	Roberts to Boyd	Serves 3 users and has a flow of 6.98 cfs; irrigates approximately 307.9 acres (124.7 hectares) of hay land. Part of the ditch flows inside the west right-of-way, paralleling the roadway.	Section may be moved beyond right-of-way.
#48 Carbonado Ditch	Roberts to Boyd	Serves 48 users and has a flow of 46.58 cfs; irrigates approximately 2,139.1 acres (866.3 hectares) of hay land.	No impacts anticipated.
Carbonado – Hoyle Ditch	Roberts to Boyd	Serves 9 users and has a flow of 26.28 cfs; irrigates approximately 929.3 acres (376.4 hectares) of hay land. Parallels the roadway but does not cross it. Part of the ditch flows inside the west right-of-way.	May be moved beyond west right-of-way, if feasible.

Mitigation for Irrigation Facility Impacts

Construction in the vicinity of Mullaney Spring will require care to avoid altering the flow rate to the water rights holder. Consultation with affected ditch associations and other landowners/ water rights holders will take place to minimize impacts to irrigation facilities. BMPs will be implemented as needed.

3.8.3 Ground Water

There are two aquifers within the project corridor; one spans from Red Lodge to approximately 2 miles (3.2 kilometers) south of Boyd and the other from approximately 2 miles (3.2 kilometers) south of Boyd for the remainder of the corridor. These aquifers are part of the Northern Great Plains Aquifer system. Additionally, a preliminary assessment has indicated that there are approximately 67 domestic wells within 100 feet of the project corridor. These wells range from a maximum depth of approximately 220 feet (67.1 meters) to a minimum depth of 11 feet (3.4 meters), averaging a depth of approximately 38.6 feet (11.8 meters).

Impacts to Ground Water

Alternative A (No-Build): If no action were taken, there would be no new impacts to ground water.

Alternative B (Preferred): Impacts to ground water resources are not anticipated as a result of the Preferred Alternative. However, the Preferred Alternative may require the relocation of domestic wells within the proposed right-of-way.

Mitigation for Ground Water

If domestic wells are displaced by the proposed project, domestic water would be restored to the affected properties. The manner in which this activity would be accomplished would be determined on a case-by-case basis.

3.8.4 Public Water Supplies

According to the MDEQ Source Water Assessment website, there are 34 PWS (public water supplies) in Carbon County, of which six are near the project corridor. These include the City of Red Lodge (MT0000314), Red Lodge KOA (MT0002030), Round Barn Restaurant (MT0002506), Crystal Springs Ice and Water (MT0003429), community of Roberts (MT0000317), and MDT's Rest Area north of Roberts (MT0001970). Following is a description of each system.

- The wells and surface water intake for the City of Red Lodge are located south of Red Lodge and are not adjacent to this project.
- The wells for the Red Lodge KOA are located east of the highway with the closest being over 1,000 feet from the highway. Additionally, the highway is not within the 100-foot radius control zone of either well for the Red Lodge KOA.
- The well for the Round Barn Restaurant is located approximately 200 feet southwest of the restaurant building. MDEQ's Source Water Assessment indicates that this water supply is not currently active.
- Limited information is available regarding the Crystal Springs Ice and Water other than the source of the water is a spring.
- The wells for the community of Roberts and the well for the Roberts Rest Area are each located approximately 150 feet from the roadway centerline. However, the 100-foot control zone for these wells does not include the roadway, but would include a portion of the highway right-of-way.

MDEQ has completed Source Water Assessment Plans for the Red Lodge, Round Barn Restaurant, Red Lodge KOA, and Rest Area systems. The majority of the plans indicated no, or a low, potential hazard posed by US Highway 212. However, the Red Lodge KOA plan indicated a moderate potential hazard from the highway. The plan for the community of Roberts has been prepared but not finalized. The draft plan indicates a low to moderate potential hazard posed by the highway, due to the potential for a spill. No plan has been developed for the Crystal Springs Ice and Water System.

Impacts to Public Water Supplies

Alternative A (No-Build): If no action were taken, there would be no new impacts to PWS.

Alternative B (Preferred): The Preferred Alternative would not impact the existing PWS and would not alter any of the assessments.

Mitigation for Public Water Supply Impacts

No impacts to PWS are anticipated as a result of the Preferred Alternative; therefore, mitigation is not required.

3.8.5 Waste Water Systems

One mound septic system has been identified within the project corridor. Additionally, a storm drain pipe has been identified along MT Highway 78. The City of Red Lodge has connected to this pipe and extended it further east to a discharge point.

Impacts to Waste Water Systems

Alternative A (No-Build): If no action were taken, there would be no new impacts to waste water systems.

Alternative B (Preferred): The existing mound system has been determined to be within the proposed right-of-way as well as the proposed construction limits associated with the Preferred Alternative. The County Sanitarian has indicated that the current mound system location is the only location that has been approved by the MDEQ; however, it would be possible to obtain MDEQ approval to relocate a portion of the system further to the west. As a result, it is anticipated that the proposed project may require the relocation of a portion of the mound system, but not a relocation of the residence.

Additionally, a new storm drain pipe and outfall may need to be constructed or the existing storm drain pipe (at the intersection of MT Highway 78 and US Highway 212) may need to be replaced, which would be determined during design. Construction of a new storm drain pipe may result in replacement of the existing storm drain and may also result in minor modifications to the existing water or waste water piping systems within Red Lodge.

Mitigation for Waste Water Systems Impacts

If the mound system were impacted, MDT would relocate the system per County and MDEQ requirements. Mitigation for the potential impacts to the existing storm drain pipe would be determined during design.

3.9 WATER BODY MODIFICATIONS

There are presently a total of 55 water crossings within the project limits. Just south of the Roberts rest area the roadway crosses Rock Creek at the Rock Creek Bridge, which was constructed in 2001. Approximately two miles south of Boyd, the roadway crosses Stanley Creek with a 10-foot by 5-foot concrete box culvert. Additionally, there are 26 other locations where the roadway crosses surface water drainages. There are also 27 locations where the roadway crosses irrigation ditches. The existing culverts generally extend from the toe of the roadway slope on one side to the toe of the roadway slope on the other side.

Water Body Modification Impacts

Alternative A (No-Build): If no action were taken, there would be no new water body modifications.

Alternative B (Preferred): No modifications or impacts to the Rock Creek Bridge or Rock Creek are anticipated at the bridge crossing. The Preferred Alternative consists of a new culvert installation at the Stanley Creek crossing. Minor inlet and outlet ditches may be required for installation of the new culvert at this location. In addition, where existing irrigation ditches are within the proposed right-of-way, MDT's standard practice is to move the irrigation ditch outside of the right-of-way.

The Preferred Alternative would consist of a wider roadway and new culverts. Minor inlet and outlet ditches may be required for installation of new culverts. The new culverts would extend the entire width of the new right-of-way and would generally be longer than the existing culverts. The longer culverts would connect to the existing ditches in their current locations and generally would not result in the need to realign ditches.

Mitigation for Water Body Modification Impacts

Drainage structures would be designed to address hydrologic conditions and comply with federal and state regulations including the Montana Stream Protection Act, Federal Clean Water Act, and Section 404/401, as applicable. Irrigation facilities would be designed in consultation with ditch owners and operators to minimize impacts to farming/ranching operations.

3.10 WETLANDS

Wetlands are defined both in the 1977 Executive Order 11990, Protection of Wetlands, and in Section 404 of the Clean Water Act of 1986, as those areas that are inundated by surface or groundwater with a frequency to support and under normal circumstances do or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Three parameters that define a wetland, as outlined in the Federal Manual for Delineating Jurisdictional Wetlands (US Army Corps of Engineers, 1987), are hydric soils, hydrophytic vegetation, and hydrology. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands are important natural resources that often serve many functions, such as providing habitat for wildlife, storing floodwaters, recharging groundwater, and improving water quality through purification.

The Biological Resources Report⁴, which is on file at MDT, provides a detailed account of wetland resources and impacts within the study area. The information is summarized below.

Wetland delineations were conducted in 2004 and 2007, resulting in a total of 98 wetland sites identified along the project corridor. Wetlands along the proposed project are generally comprised of emergent communities, including roadside ditches, sub-irrigated pastures, fringes of irrigation ditches or canals, and streams (Rock Creek and Stanley Creek). Hydrology at a large percentage of the wetlands appears to be related to irrigation ditch flows or groundwater influenced by the presence of irrigation ditches adjacent to the wetland. Wetland soils generally consist of silty or sandy clay loams.

⁴ Land & Water Consulting, Inc., *Red Lodge-North Final Biological Resources Report* (Apr. 2004, Supplement 2007)

The majority of wetlands were rated as Category III and IV sites using the 1999 MDT Montana Wetland Assessment Method. Three sites (64, 68, and 68a) were rated as Category II sites and received high ratings in the General Wildlife Habitat variable. All existing sites were considered highly disturbed in the immediate project area due to road and right-of-way maintenance activities, proximity to roads and residential sources of disturbance, and physical encroachment resulting from access roads, bridges, and culverts. All of the wetland sites scored high in the Nutrient, Toxicant, Removal Sediment/Shoreline Stabilization variables as a result of the borrow ditch location and/or irrigation ditch components of the wetlands.

How are wetlands categorized?

MDT assesses functions and values of a wetland based on a point scale. The points for each function are added up and the sum determines which category of wetland it is. The larger the total point value, the higher value and quality a wetland is. Category I is the highest overall ranking a wetland can receive, followed by Category II, Category III, and Category IV.

On May 6, 2003, representatives from MDT, USACE (US Army Corps of Engineers), KL&J (Kadmas, Lee & Jackson, Inc.), and PBS&J/Land and Water Consulting, Inc., conducted a field review and USACE provided preliminary jurisdictional determinations of wetlands along the project corridor. Preliminary jurisdictional determinations were not conducted for the 2007 wetland delineations. Coordination with USACE will continue throughout design of the proposed project.

Impacts to Wetlands

Alternative A (No-Build): If no action were taken, no new impacts to wetlands would occur.

Alternative B (Preferred): The Preferred Alternative would result in an estimated 40.7 acres (16.5 hectares) of wetland impacts. Of this, approximately 24.8 acres (9.7 hectares) are considered jurisdictional wetlands based on preliminary determinations⁵. See *Table 3.8, Estimated Wetland Impacts*.

There are no feasible alternatives that would completely avoid wetland impacts. Many of the impacts would occur at sites immediately adjacent to the road, often on both sides, and would be largely unavoidable even if the roadway centerline were shifted in either direction. However, minimization efforts have been included in preliminary project design; the Preferred Alternative was modified at the Cooney Dam Road intersection in Boyd to avoid impacts to a meandering stream channel.

⁵ In light of the *Rapanos vs. United States* decision in 2006 and the subsequent EPA and USACE joint guidance regarding the outcome of *Rapanos* in 2007, the initial jurisdictional determinations may change during the permitting stage of the project.

**Table 3.8
Estimated Wetland Impacts**

Site	MDT Wetland Rating Category	Likely Jurisdictional ⁶	Estimated Impacts (Acres [Hectares])	Source of Wetland Hydrology
1	IV		0.3 (0.1)	Irrigation and storm water
2	III	✓	0.4 (0.2)	Ground water
3	IV	✓	0.4 (0.2)	Spring from the hillside on west side of roadway
4	III	✓	< 0.1 (< 0.04)	Site 3 ditch leakage
5	III	✓	< 0.1 (< 0.04)	Open water pond within the golf course
6	III	✓	< 0.1 (< 0.04)	Ground water
6a	III	✓	0.1 (0.04)	Ground water
7	III	✓	0.3 (0.1)	Ground water
8	III	✓	0.1 (0.04)	Ground water; open water pond on left side of road.
9	III	✓	0.1 (0.04)	Ground water, hillside spring and open water pond.
10	III	✓	0.5 (0.2)	Ground water and irrigation flows.
10a	III	✓	< 0.1 (< 0.04)	Ground water and irrigation flows.
11	IV	✓	< 0.1 (< 0.04)	Ground water
12	IV	✓	< 0.1 (< 0.04)	Ground water
12a	IV	✓	< 0.1 (< 0.04)	Irrigation ditch and hillside springs
13	III		< 0.1 (< 0.04)	Ground water and irrigation source.
14	III	✓	0.9 (0.4)	Irrigation ditch and influenced by Site 62 hydrology.
14a	IV		< 0.1 (< 0.04)	Irrigation ditch
15	III		< 0.1 (< 0.04)	Likely storm and irrigation water
15a	III		0.1 (0.04)	Likely storm and irrigation water
16	III		< 0.1 (< 0.04)	Taylor Ditch
17	III		0.4 (0.2)	Ground water
17a	IV		< 0.1 (< 0.04)	Irrigation ditch/Rock Creek
18	III		0.1 (0.04)	Leakage from irrigation ditch to east
19	III		0.1 (0.04)	Irrigation ditch/Rock Creek

Continued...

⁶ Sites 1-64 were delineated in 2004 and USACE gave preliminary jurisdictional determinations for these sites. Due to modifications of the Preferred Alternative, a wetland delineation was conducted for additional areas in 2007. Sites 65- 72a reflect the additional areas delineated. These wetlands were not included in the 2003 preliminary jurisdictional determination; therefore, PBS&J determined likely jurisdictional status. Final jurisdictional and non-jurisdictional status will be determined by USACE.

**Table 3.8
Estimated Wetland Impacts**

Site	MDT Wetland Rating Category	Likely Jurisdictional⁶	Estimated Impacts (Acres [Hectares])	Source of Wetland Hydrology
19a	III		0.2 (0.08)	Irrigation ditches/Rock Creek
20	III		< 0.1 (< 0.04)	Irrigation ditch/Rock Creek
20a	IV		0.2 (0.08)	Irrigation ditch/Rock Creek
21	III		< 0.1 (< 0.04)	Finn Ditch/Rock Creek
21a	III		< 0.1 (< 0.04)	Finn Ditch/Rock Creek
22	III		0.1 (0.04)	Ground water and potential surface water
22a	III		< 0.1 (< 0.04)	Irrigation ditch/Rock Creek
23	III	✓	0.1 (0.04)	Ground water via a pipe from unknown source
24	III		0.2 (0.08)	Irrigation ditch/Ground water
25	III	✓	1.4 (0.6)	Irrigation ditches/Ground water/Rock Creek
25a	III	✓	< 0.1 (< 0.04)	Irrigation ditches/Ground water/Rock Creek
26	III	✓	0.3 (0.1)	Ground water/Irrigation ditch
26a	III	✓	4.7 (1.9)	Ground water/Irrigation ditches
27	IV	✓	0.2 (0.08)	Irrigation ditch/Ground water/Rock Creek
27a	IV	✓	0.6 (0.2)	Irrigation ditch/Ground water/Rock Creek
28	IV	✓	0.3 (0.1)	Irrigation ditch/Ground water/Rock Creek
28a	IV	✓	< 0.1 (< 0.04)	Irrigation ditch/Ground water/Rock Creek
29	IV		< 0.1 (< 0.04)	Irrigation ditch/Rock Creek
30	III	✓	0.5 (0.1)	Ground water
30a	III	✓	0.3 (0.1)	Rock Creek
31	III		0.1 (0.04)	Ground water/Irrigation ditch
32	III		2.2 (0.9)	Ground water/Irrigation ditch
33	III		0.1 (0.04)	Ground water/Highline ditch
34	III		0.6 (0.2)	Ground water/Highline ditch
35	III		< 0.1 (< 0.04)	Ground water
36	III		1.2 (0.5)	Ground water/Irrigation ditch
37	III	✓	2.8 (1.1)	Ground water and ditch seeps from Rooney Ditch
38	III	✓	0.1 (0.04)	Stanley Creek

Continued...

**Table 3.8
Estimated Wetland Impacts**

Site	MDT Wetland Rating Category	Likely Jurisdictional ⁶	Estimated Impacts (Acres [Hectares])	Source of Wetland Hydrology
38a	III	✓	2.6 (1.1)	Irrigation ditches
39	IV		< 0.1 (< 0.04)	Ward Ditch/Rock Creek
39a	IV		< 0.1 (< 0.04)	Ward Ditch/Rock Creek
40	III		0.1 (0.04)	Ward Ditch
41	III		0.4 (0.2)	Irrigation Ditch
41a	III	✓	0.4 (0.2)	Source unknown
42	IV	✓	0.2 (0.08)	Source unknown
43	III	✓	0.1 (0.04)	Ground water
44	III		0.9 (0.4)	Ground water
45	III	✓	0.8 (0.3)	Hoyle Ditch/Rock Creek
46	III	✓	0.1 (0.04)	Lateral ditch/Stanley Creek
47	IV	✓	0.1 (0.04)	Stanley Ditch/Carbonado Ditch
47a	IV	✓	1.3 (0.5)	Stanley Ditch/Carbonado Ditch
48	III		0.4 (0.2)	Irrigation laterals
49	III		5.0 (2.0)	Ground water/Irrigation ditch
50	III	✓	0.6 (0.2)	Rock Creek ground water
50a	III	✓	0.2 (0.08)	Rock Creek ground water
51	III	✓	0.5 (0.2)	Subirrigation
52	III		0.4 (0.2)	Irrigation ditch/Rock Creek
53	III	✓	0.2 (0.08)	Ground water
54	III	✓	0.5 (0.2)	Ground water
55	III	✓	1.2 (0.5)	Ground water/Irrigation ditches
56	III		0	Storm water
57	III		0	Storm water
58	III		0.1 (0.04)	Ground water
59	III		< 0.1 (< 0.04)	Ground water
60	IV		0.1 (0.04)	Irrigation ditch
61	III		< 0.1 (< 0.04)	Kivikangas Ditch/Rock Creek
61a	III		< 0.1 (< 0.04)	Kivikangas Ditch/Rock Creek
62	III	✓	1.1 (0.4)	Ground water/Irrigation ditches
63	III		< 0.1 (< 0.04)	Irrigation ditch
64	II	✓	2.2 (0.9)	Ground water/Hillside spring

Continued...

Table 3.8 Estimated Wetland Impacts				
Site	MDT Wetland Rating Category	Likely Jurisdictional ⁶	Estimated Impacts (Acres [Hectares])	Source of Wetland Hydrology
65	III	Unknown	0.1 (0.04)	Site 66, an irrigation ditch, may supply groundwater for the site.
66	IV	✓	0	Likely Rock Creek. Another undelineated wetland is located upslope of ditch.
67	III	Unknown	< 0.1 (< 0.04)	Wetlands occur as a result of a man-made drain ditch.
67a	III	Unknown	0.1 (0.04)	Wetlands occur as a result of a man-made drain ditch.
67b	III	Unknown	< 0.1 (< 0.04)	Groundwater likely supports these wetlands.
68	II	✓	0	Rock Creek overflow.
68a	II	✓	< 0.1 (< 0.04)	Rock Creek overflow.
69	III	✓	< 0.1 (< 0.04)	Slope wetland upslope of Site 70
70	III	Unknown	0	Irrigation water
71	IV	Unknown	0	Irrigation water
71a	IV	Unknown	0	Irrigation water
72	III	Unknown	0	Irrigation water
72a	III	Unknown	0	Irrigation water
TOTAL			40.7 (16.5)⁷	

Mitigation for Wetland Impacts

Compensation for unavoidable impacts to wetlands would involve the evaluation of both on-site and off-site mitigation opportunities in an effort to develop replacement wetlands to offset impacts to these natural resources within the project corridor. On-site wetland mitigation opportunities would be evaluated in areas adjacent to the new roadway. The purpose of on-site mitigation would be to reduce permanent loss of wetland functions and values, maintain hydrologic connectivity with other existing wetlands, restore drained and degraded wetlands, and replace wildlife habitat in the region associated with impacted wetlands by the road project.

Off-site mitigation would be pursued after all on-site mitigation opportunities have been evaluated and it has been determined that additional wetland mitigation is needed to offset the project impacts. For the purpose of this project, off-site mitigation would occur at existing USACE-approved MDT Wetland Mitigation Reserves that have been established within the Watershed # 13—Upper Yellowstone River Basin. Potential off-site mitigation options currently include the MDT Stillwater, Wagner Pit, and/or DH Ranch Mitigation Reserves. At the time of

⁷ Due to the amount of individual wetland impacts that totaled less than 1/10 of an acre, the total reflects the summation of wetland impacts computed to the thousandth of an acre and then rounded to the tenth of an acre.

construction, other mitigation sites may be available. MDT will coordinate with the appropriate agencies to determine where off-site mitigation, if necessary, will be carried out.

3.11 WILDLIFE HABITAT AND ECOSYSTEMS

Pursuant to the Fish and Wildlife Coordination Act (16 U.S.C. 662), if the proposed improvements would affect water resources, then consultation with the USFWS (US Fish and Wildlife Service) and with the state agency having administrative responsibilities over wildlife resources must be initiated. This consultation is to determine the possible wildlife resources, the means and measures that should be adopted to prevent the loss of, or damage to, those resources, and to provide concurrently for the development and improvement of such resources. The Act also provides for the protection of any publicly owned wildlife or waterfowl refuge of national, state or local significance as addressed under Section 4(f) discussed in Chapter 4, as well as threatened and endangered species discussed in Section 3.13.

A Biological Resources Report was prepared for this project⁸. Methods used to obtain information regarding the wildlife and habitat conditions within the project area included coordination with the USFWS, MNHP (Montana Natural Heritage Program), and MT FWP (Montana Fish, Wildlife & Parks). Pertinent literature and information, including the Montana Rivers Information System, were reviewed, and a field survey was conducted on July 30–August 1, 2002, which provided detailed information pertaining to the ecology of the project corridor. Following is a summary of the information provided in the Biological Resources Report.

3.11.1 Vegetation

Vegetation along the project corridor predominantly consists of both upland grass and wetland species such as orchardgrass, meadow foxtail, redtop, fox-tail barley, reed canary grass, reed manna grass, Kentucky bluegrass, smooth brome, timothy, western wheatgrass, bluejoint reedgrass, yellow sweetclover, alfalfa, Canada thistle, spotted knapweed, houndstongue, bladderwort campion, showy milkweed, spreading dogbane, and western salsify. In addition to these grassland species, low shrubs such as western snowberry, big sage, rose, red-osier dogwood, sandbar willow, Pacific willow, Bebb's willow, choke cherry, river birch, aspen, and narrow-leaf cottonwood can be found scattered along the project corridor.

How are weeds categorized?

The Montana Department of Agriculture separates noxious weeds into three categories. Category I species are those that are generally widespread and established throughout the State and counties; Category II species have recently been introduced to the State or are rapidly spreading from their current site; and Category III species have not been detected in the State or are found in small, localized areas.

Ten noxious weeds were identified within the project corridor: spotted knapweed, Russian knapweed, field bindweed, oxeye daisy, Canada thistle, houndstongue, leafy spurge, dalmation toadflax, sulfur cinquefoil, and tall buttercup. All of these exotic species are listed as Category I species with the exception of tall buttercup, which is listed as a Category II species. Canada thistle and houndstongue were commonly observed within the project corridor. No Category III species were identified within the project corridor.

⁸ Land & Water Consulting, Inc., *Red Lodge-North Final Biological Resources Report* (Apr. 2004)

Impacts to Vegetation

Alternative A (No-Build): If no action were taken, there would be no new impacts to vegetation.

Alternative B (Preferred): The Preferred Alternative would remove thick brush and trees from the clear zone to improve driver visibility of approaching wildlife, as discussed further in Section 3.11.5. Additionally, vegetation would be removed in select areas along the project corridor for ditch slope flattening, shoulder widening, and pedestrian/bicycle facilities construction. The clearing of ground cover along the corridor has the potential to open areas to noxious weeds.

Mitigation for Vegetation Impacts

Clearing of vegetation would be done in accordance with MDT Standard Specifications. Noxious weeds would be controlled as discussed further in Section 3.18.4.

3.11.2 Terrestrial and Avian Species

A variety of wildlife species are found throughout the project corridor. Wildlife species in this area are typical of those that occur in grasslands, cultivated lands, and riparian areas of central Montana. Common mammals that within or near the project area include mule deer, white-tailed deer, moose, porcupine, raccoon, striped skunk, badger, coyote, thirteen-lined ground squirrel, white-tail jackrabbit, red fox, deer mouse, and meadow vole. Common amphibious and reptilian species within or near the project area include tiger salamander, western toad, woodhouse's toad, western chorus frog, northern leopard frog, spotted frog, short-horned lizard, painted turtle, rubber boa, racer, gopher snake, western rattlesnake, common garter snake, and western terrestrial garter snake. Birds observed during the Biological Resources Report survey included raven, European starling, black-billed magpie, brown-headed cowbird, and an osprey.

Impacts to Terrestrial and Avian Species

Alternative A (No-Build): If no action were taken, there would be no new impacts to terrestrial or avian species.

Alternative B (Preferred): The Preferred Alternative may result in minor fragmentation, modification, and/or loss of habitat for terrestrial and avian species. This may occur due to water body modifications, increased impervious surfaces resulting in greater runoff, and clearing of thick brush and trees within the clear zone. However, the Preferred Alternative would remain on the existing roadway alignment and the project corridor mainly consists of areas previously disturbed by human activities, such as residential and agricultural activities. Also, the clearing of vegetation in the clear zone may reduce wildlife mortality caused by animal-vehicle collisions, as discussed in Section 3.11.5. Therefore, substantial impacts to terrestrial and avian species are not anticipated.

Mitigation for Terrestrial and Avian Species Impacts

Substantial adverse impacts to terrestrial and avian species are not anticipated. However, BMPs would be implemented. Wetlands would be mitigated, as discussed in Section 3.10, disturbed areas would be reseeded and an erosion and sediment control plan would be implemented. Activities would be in compliance with the Migratory Bird Treaty Act and MDT's most current depredation permit from the USFWS, as discussed further in Section 3.18.4.

3.11.3 Aquatic Species

Fish and aquatic species can be found in Rock Creek, Stanley Creek, and several irrigation ditches, all of which are crossed by the project corridor. Fish species that may occur within the project area include brook trout, brown trout, longnose dace, mottled sculpin, mountain sucker, mountain whitefish, rainbow trout, and white sucker.

Impacts to Aquatic Species

Alternative A (No-Build): If no action were taken, there would be no new impacts to aquatic species.

Alternative B (Preferred): The Preferred Alternative may result in impacts to aquatic species via culvert replacement, highway fill placement, the increase of impervious surfaces which may cause increased runoff, and increased water temperature due to potential clearing and grubbing in riparian areas. However, no substantive losses of spawning habitat for fish species are anticipated and the increase in water temperature is expected to be negligible as most clearing and grubbing would not occur in riparian areas.

Mitigation for Aquatic Species Impacts

Impacts to aquatic species habitat would be minimized with the implementation of BMPs during construction. Unavoidable impacts would be mitigated as required by the applicable permits and regulations, specifically Section 402 and 404 of the CWA and the Montana Stream Protection Act.

3.11.4 Montana Species of Concern

Information regarding Montana Species of Concern was obtained through coordination with the MNHP (Montana Natural Heritage Program). Five species of concern have been identified within or near the project corridor: Beautiful Fleabane, Gray Wolf, Greater Sage-grouse, Milksnake, and Preble's shrew.

- **Beautiful Fleabane (*Erigeron formosissimus*).** The beautiful fleabane has a G5/S1 ranking, meaning globally the species is common and widespread in most of its range while within Montana it is considered at high risk because of extremely limited and/or rapidly declining numbers, range, and/or habitat, making it highly vulnerable to extinction or extirpation. It is found in meadows and forest openings in the montane and subalpine zones. It was last observed in the project area in 1919.
- **Gray Wolf (*Canis lupus*).** The gray wolf has a G4/S3 ranking, meaning globally the species is uncommon but not rare and is usually widespread; however, within Montana they are considered potentially at risk because of limited and/or declining numbers, and/or habitat. Historically gray wolves have been found in a variety of biomes such as boreal forest, temperate deciduous forest, and temperate grassland. The gray wolf was last observed in the project area in 2006.
- **Greater Sage-grouse (*Centrocercus urophasianus*).** The greater sage-grouse has a G4/S3 ranking and are typically found in sagebrush habitat. There have been no known observations of greater sage-grouse within the project area.
- **Milksnake (*Lampropeltis triangulum*).** The milk snake has a G5/S2 ranking, meaning globally it is common and often widespread while in the State it is at high risk for

extinction due to declining numbers, range, and/or habitat. Milk snakes have been most often reported in open sagebrush habitat and ponderosa pine savannah with sandy soils. There have been no known observations of milk snakes within the project area.

- **Preble's Shrew (*Sorex preblei*).** The preble's shrew has a G4/S3 ranking and have been observed in sageland-grassland habitats. The preble's shrew has not been observed in the project area since 1968.

Impacts to Montana Species of Concern

Alternative A (No-Build): If no action were taken, there would be no impacts to Montana Species of Concern.

Alternative B (Preferred): Many of the species of concern have either not been observed or have not been observed in recent years within the project corridor, with the exception of the gray wolf. Therefore, impacts to species of concern are not anticipated. Adverse impacts to the gray wolf are not anticipated, as discussed further in Section 3.13. However, the gray wolf would be subject to the same impacts as other terrestrial species, as discussed in Section 3.11.2.

Mitigation for Montana Species of Concern Impacts

No adverse impacts to species of concern are anticipated; therefore, no mitigation is required.

3.11.5 Animal-Vehicle Collisions

AVC (animal-vehicle collisions) are a concern along the project corridor, as evidenced by the crash history data, public comments, and comments from the MT FWP. According to MDT crash history data, there were 441 reported crashes along the project corridor during the 15-year period between January 1992 and December 2006. AVC accounted for approximately 36.9 percent of these accidents, which is nearly three times the statewide average of 13.7 percent. MDT maintenance records identified that during the 9-year period of November 1997 through December 2006, MDT maintenance staff removed 1,103 animal carcasses from the roadway along the project corridor. This indicates that many AVC along the corridor have not been reported. Previous findings support this trend; a paper published in the Wildlife Society Bulletin suggests that AVC estimates should be increased by 16-50 percent when based on accident reports⁹.

According to MDT maintenance records, approximately 98.5 percent of the AVC were with deer (94 percent white-tailed deer, 4 percent mule deer, and 0.5 percent unknown deer). The remaining AVC occurred approximately equally with elk, moose, other wild animals such as raccoons, and domestic animals such as horses and dogs.

The data were reviewed to determine whether there were any focal zones along the project corridor. A focal zone is a stretch of roadway where wildlife movement is notably concentrated and which offers distinct opportunities for implementing effective mitigation measures to improve

⁹ Romin, L.A. and J.A. Bissonnette. 1996. Deer-vehicle collisions: Status of state monitoring activities and mitigation efforts. Wildlife Society Bulletin 24 (2):276-283

highway permeability for wildlife and to reduce AVC¹⁰. No focal zones were identified; the AVC were distributed along the entire length of the project corridor.

The maintenance data were also analyzed to determine whether there was a seasonal pattern to the AVC. This analysis identified that 67 percent of these collisions occurred during the months of October through January.

Complex interactions of many factors influence the frequency of AVC on a roadway. A primary factor is wildlife population density. Some other factors include traits inherent to individual wildlife species such as mobility, food preferences, behavior, reproductive patterns and movement. Other factors may be related to wildlife habitat, such as the location of resources like water, food, cover, breeding areas, or migration routes. Additional factors apply to the road itself, including road design (width, alignment, grade, clear zone width, number of lanes), vehicle speed and traffic volume. Also affecting the frequency of AVC are factors related to driver characteristics and behaviors including vehicle type, attentiveness, and reaction time.

Impacts to Animal-Vehicle Collisions

Alternative A (No-Build): If no action were taken, the high frequency of AVC would continue and would not be addressed.

Alternative B (Preferred): The Preferred Alternative would involve removing thick brush and trees within the clear zone. This vegetation removal may discourage animals that like cover from approaching the road, improve driver visibility of approaching wildlife, and increase driver response time.

Mitigation for Animal-Vehicle Collision Impacts

MDT recognizes the high frequency of AVC along the project corridor and will make a good faith effort to incorporate appropriate mitigation measures into the project design. MDT will make decisions based on the best available research and information at the time, as well as the need to balance roadway design criteria, funding constraints, and other factors.

There are no obvious focal zones along the corridor at which mitigation measures are easily identifiable. The topography in the project area is very flat, and the groundwater levels are high; this does not lend itself well to constructing wildlife underpasses, a common mitigation measure. Further, it is anticipated that the travel patterns of deer and other wildlife have and may continue to change in response to the ongoing land use and development changes in the project area.

In addition to vegetation removal from the clear zone, MDT will evaluate the practicality of the following mitigation measures during project design¹¹:

- *Wildlife-friendly fencing* is a fence design that enables wildlife to leap over or crawl under the fence without injury. The most common wildlife friendly fencing design is a three to four wire fence no more than 40 inches high. The bottom wire should be smooth and at

¹⁰ Southern Rockies Ecosystem Project. 2006. Linkage Assessment Methodology, Linking Colorado's Landscapes Phase II Report. Southern Rockies Ecosystem Project. Denver, CO.

¹¹ Descriptions of the mitigation measures were taken from the Southern Rockies Ecosystem Project. 2006. Linkage Assessment Methodology, Linking Colorado's Landscapes Phase II Report. Southern Rockies Ecosystem Project. Denver, CO.

least 16 inches from the ground to allow wildlife to pass under safely. There should be at least 12 inches between the top two wires to prevent deer, elk, and moose from getting caught in the fence when they jump due to the way they kick their hind legs backwards. Although wildlife friendly fencing does not stop wildlife from crossing the roadway, it does allow them to cross quickly in and out of the right-of-way—limiting the time spent in the AVC zone. The installation of wildlife-friendly fencing would be negotiated with adjacent landowners during right-of-way negotiations.

- *Signage* may be used to alert drivers to the presence of wildlife along the right-of-way, particularly during the months of October through January, when most of the AVC occur along the project corridor. Research has shown that static, permanent signage is ineffective; however, variable message signs are more successful at encouraging drivers to reduce their speeds.
- A *wildlife detection system*, such as laser detectors, motion sensors, or heat detection systems, may be used. Such systems are activated when large animals interrupt sensors set up along the right-of-way, thereby alerting drivers via a message board or flashing lights to the presence of animals entering the right-of-way. Wildlife detection systems are effective for large animals such as deer (which account for 98.5 percent of the AVC along the project corridor). Wildlife detection systems can be cost effective for relatively straight and flat stretches of highway, such as the project corridor, where the sensors can be placed further apart.

3.12 FLOODPLAIN

Floodplains constitute lands situated along rivers and their tributaries that are subject to periodic flooding with a one-percent chance of being flooded in any given year, on the average interval of 100 years or less. Pursuant to Executive Order 11988, Floodplain Management, issued in 1977, the following criteria apply to this project: potential effects on floodplains must be evaluated; alternatives that avoid adverse effects and incompatible development in floodplains must be evaluated; and if it is found that the only practicable alternative requires siting in a floodplain, it is necessary to design or modify the project in order to minimize potential harm to or within the floodplain.

The project corridor follows Rock Creek Valley for the extent of the project between two benches, east and west, which rise 100 feet (30 meters) above the stream valley floor. The southern end of the project corridor is located just west of Rock Creek. The project corridor remains west of Rock Creek until about 1.5 miles (2.4 kilometers) past Roberts, then crosses Rock Creek and remains east of Rock Creek for the remainder of the corridor. One portion of the project corridor, near Clear Creek Road, is located within the FEMA (Federal Emergency Management Agency)-identified 100-year base flood elevation (4413NGVD29) for Rock Creek. Since the development of the 100-year base flood elevation map, portions of the Rocky Fork Branch of the Northern Pacific Railroad have been removed; this may have altered the base flood elevation.

Floodplain Impacts

Alternative A (No-Build): If no action were taken, there would be no new impacts to floodplains.

Alternative B (Preferred): The Preferred Alternative may include minor approach work at the new Rock Creek Bridge, which would require contact and coordination with the county floodplain administrator. Coordination with the county floodplain administrator would occur to determine whether minor encroachment of the floodplain would occur and whether a floodplain

development permit is required. However, the build alternative is not anticipated to increase the 100-year base flood elevation over existing conditions, pursuant to MCA (Montana Code Annotated) Title 76, Land Resources and Use; Chapter 5, Floodplain and Floodway Management. The Preferred Alternative may also include one or more new storm water outfall locations to Rock Creek.

Mitigation for Floodplain Impacts

The Preferred Alternative is not anticipated to increase the 100-year base flood elevation over existing conditions. However, coordination with the county floodplain administrator would occur to determine potential encroachment of the floodplain, and permit and mitigation requirements.

3.13 THREATENED OR ENDANGERED SPECIES

Section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1536), requires each federal agency to ensure that any action funded or carried out by such agency is not likely to jeopardize the continued existence of any federally-listed endangered or threatened species or species proposed to be listed, or likely to result in the destruction or adverse modification of habitat of such species which is determined to be critical by the Secretary of the Interior. An endangered species is in danger of extinction throughout all or a significant portion of its range. A threatened species is one that is likely to become endangered in the near future.

Consultation with USFWS and a review of the lists of listed, proposed, or candidate threatened and endangered species in Montana were used to identify any such species that may be located in the project area. Range/habitat descriptions found in technical literature were also reviewed to determine which listed or proposed species may be located in the project corridor. Following is a summary of the findings¹².

Two species were considered with respect to the project: the bald eagle (*Haliaeetus leucocephalus*) and the Yellowstone nonessential experimental population of gray wolves (*Canis lupus*)¹³.

No known, confirmed, or suspected bald eagle nests occur within several miles of the proposed project corridor. Although the bald eagle was identified as a federally-listed threatened species at the time of project coordination with the USFWS, the USFWS de-listed the bald eagle with an effective date of August 8, 2007¹⁴. However, the bald eagle is still afforded protection under the Bald and Golden Eagle Protection Act of 1940, 16 USC 668-668d as amended, and the Migratory Bird Treaty Act of 1918, 16 USC 703-712 as amended.

The gray wolf was reclassified from endangered to threatened on March 18, 2003, and the USFWS concurrently published an Advance Notice of Proposed Rulemaking to notify the public that the USFWS will soon begin work to propose delisting certain populations, including those in the state of Montana. Newly formed wolf pack activity has been reported a few miles

¹² Land & Water Consulting, Inc., Red Lodge-North Final Biological Resources Report (Apr. 2004)

¹³ The black-footed ferret (*Mustela nigripes*), an endangered species; and the black-tailed prairie dog (*Cynomys ludovicianus*), which was, and is no longer, a candidate to be listed as threatened, were also evaluated. Neither of these species are known to inhabit the project corridor, and it was determined that the proposed project would have no effect to these species.

¹⁴ 72 FR 37345

south/southeast of Red Lodge. However, this wolf population is considered a non-essential experimental population, and no active wolf dens are known to occur in the project corridor.

Impacts to Threatened or Endangered Species

Alternative A (No-Build): If no action were taken, there would be no new impacts to threatened or endangered species.

Alternative B (Preferred): The USFWS has determined that the proposed build alternative is not likely to affect individual bald eagles or jeopardize the continued existence of non-essential experimental gray wolves. See *Appendix C, March 2002 Agency Scoping, Letter #5* and *Appendix D, May 2007 Agency Scoping, Letter #3*.

Mitigation for Threatened or Endangered Species Impacts

Adverse impacts to threatened and endangered species are not anticipated; therefore, no mitigation is required.

3.14 CULTURAL RESOURCES

Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470), as amended, requires that federally funded projects be evaluated for the effects¹⁵ on historic and cultural properties included in, or eligible for listing on, the NRHP (National Register of Historic Places). The Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 461 et seq., and 23 U.S.C. 305) provides for the survey, recovery, and preservation of significant scientific, prehistoric, archaeological, or paleontological data when such data may be destroyed or irreparably lost due to a federally licensed or federally funded project.

In order to identify cultural resources along the project corridor and to determine potential impacts, three cultural resource surveys were undertaken^{16,17, 18}, as was a historical inventory¹⁹ within Red Lodge and Roberts. These surveys identified numerous historic properties, including:

- Two historic districts in Red Lodge
- Eight properties in Red Lodge that are listed on or eligible for the NRHP, or contributing to the historic districts
- Three properties eligible for the NRHP between Red Lodge and Roberts
- Four properties eligible for the NRHP in Roberts
- One property eligible for the NRHP in Boyd
- One property listed on the NRHP, which spans the project corridor (Rocky Fork Branch of the Northern Pacific Railroad)
- Eleven historic irrigation ditches along the project corridor

¹⁵ Effect means alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register (36 CFR § 800.16).

¹⁶ Historical Research Associates, Inc., *Report of a Cultural Resource Inventory of the Red Lodge-North Project Corridor, Along Highway 212 in Carbon County, Montana* (Feb. 1997)

¹⁷ Metcalf Archaeological Consultants, Inc., *Red Lodge North, Highway 212 Improvements: A Cultural Resource Inventory from Roberts to Boyd, Carbon County, Montana* (Oct. 2002)

¹⁸ Earthworks, Inc., *Highway 212 North: A Cultural Resource Inventory, Carbon County, Montana* (June 2007).

¹⁹ Joan Brownell, *Historic Inventory: Red Lodge North Project, Carbon County, Montana*; Project STPP 28-2 (25) 70 (Feb. 2003)

Impacts to Cultural Resources

Alternative A (No-Build): If no action were taken, there would be no impacts to historic and cultural properties.

Alternative B (Preferred): MDT has determined, and SHPO (State Historic Preservation Office) has concurred, that the proposed project would have *No Effect* or *No Adverse Effect* to all of the historic properties. See *Table 3.9, Impacts to Historic Properties, and Appendix E, Cultural Resources*.

Mitigation for Cultural Resources Impacts

The Preferred Alternative would have *No Effect* or *No Adverse Effect* to cultural resources; therefore, no further mitigation/avoidance measures are required.

Table 3.9 Impacts to Historic Properties				
Site #	General Description	Location	Status	SHPO Finding
24CB145	Red Lodge Commercial Historic District	Red Lodge	Listed	No Effect ¹
24CB1030	Hi Bug Historic District	Red Lodge	Listed	No Effect ¹
24CB145	Carnegie Library	Red Lodge	Listed	No Adverse Effect ⁵
24CB1819	One and a half story front gable cottage	Red Lodge	Not Eligible but Contributing	No Effect ¹
24CB1820	One and a half story front gable cottage	Red Lodge	Not Eligible but Contributing	No Effect ¹
24CB1821	One and a half story front gable cottage	Red Lodge	Not Eligible but Contributing	No Effect ¹
24CB1822	Two story Queen Anne residence (Finley House)	Red Lodge	Eligible and Contributing	No Effect ¹
24CB1827	One story wood frame bungalow (Richardson Bungalow)	Red Lodge	Eligible	No Effect ¹
24CB1830	Self contained elevator (MT Dakota Grain Company Elevator)	Red Lodge	Eligible	No Effect ¹
24CB1833	Dairy Delite Drive-In	Red Lodge	Eligible	No Effect ¹
24CB1320	Kent Dairy Round Barn	Red Lodge to Roberts	Eligible	No Effect ⁴
24CB1336	Carbon County Dairy/Maryott Ranch	Red Lodge to Roberts	Eligible	No Effect ¹
24CB1339	Maryott agricultural complex	Red Lodge to Roberts	Eligible	No Effect ⁴
24CB1705	One story Craftsman residence (O'Shea House)	Roberts	Eligible	No Adverse Effect ¹

Continued...

Table 3.9
Impacts to Historic Properties

Site #	General Description	Location	Status	SHPO Finding
24CB1712	One story American Four-Square/Craftsman residence (Silakka House)	Roberts	Eligible	No Effect ¹
24CB1717	St. Thomas Catholic Church	Roberts	Eligible	No Effect ⁴
24CB1720	One story vernacular-style residence (Monahan House)	Roberts	Eligible	No Effect ⁴
24CB1831	Boyd Country Store (Boyd Mercantile)	Roberts to Boyd	Eligible	No Effect ¹
24CB1283	Rocky Fork Branch of the Northern Pacific Railroad	Red Lodge to Boyd	Listed	No Adverse Effect ²
24CB1722	Brandt Ditch	Roberts	Eligible	No Effect ³
24CB1723	Rule-Thompson Ditch	Roberts	Eligible	No Adverse Effect ³
24CB1724	Duncan-Aiken Ditch	Roberts to Boyd	Eligible	No Effect ³
24CB1725	Bernhardt Ditch	Roberts to Boyd	Eligible	No Effect ³
24CB1726	Hunts Ditch	Roberts to Boyd	Eligible	No Adverse Effect ³
24CB1727	Highline Ditch	Roberts to Boyd	Eligible	No Adverse Effect ³
24CB1728	Rooney Ditch	Roberts to Boyd	Eligible	No Adverse Effect ³
24CB1729	Drakes Ditch	Roberts to Boyd	Eligible	No Adverse Effect ³
24CB1730	Ward Ditch	Roberts to Boyd	Eligible	No Adverse Effect ³
24CB1731	Carbonado Ditch	Roberts to Boyd	Eligible	No Effect ³
24CB1761	Hoyle Ditch	Roberts to Boyd	Eligible	No Adverse Effect ³

¹ April 22, 2003 Montana SHPO concurrence

² September 25, 2003 Montana SHPO concurrence

³ June 10, 2005 Montana SHPO concurrence

⁴ July 12, 2005 Montana SHPO concurrence

⁵ September 17, 2007 Montana SHPO concurrence

3.15 SECTION 6(f) PROPERTIES

Section 6(f)(3) of the Land and Water Conservation Fund Act of 1965, as amended, specifies that no property acquired or developed with assistance from Section 6(f) Funds shall, without the approval of the Secretary of the Interior, be converted to other than public outdoor recreation uses. The Secretary shall approve such conversion only when: 1) the Secretary finds it to be in accord with the [current] comprehensive statewide outdoor recreation plan and 2) the recreation

properties are replaced with other public outdoor recreation properties of at least equal fair market value and/or reasonable equivalent usefulness and location.

There are four Section 6(f) properties within the project corridor. Three are fishing access sites: Horse Thief Station, Bull Springs, and Water Birch. The fourth is Roberts Public School.

Impacts to Section 6(f) Properties

Alternative A (No-Build): If no action were taken, there would be no impacts to Section 6(f) properties.

Alternative B (Preferred): The Preferred Alternative would not result in the conversion of the three fishing access sites or Roberts Public School to a transportation facility. In order to avoid the Roberts Public School playground, the typical section along the school was altered to include a guardrail and 2:1 ditch slopes.

In addition, any directional and entrance signs that may be removed would be reinstalled following construction. If impacts occur to the entrance road for the Water Birch fishing access site, it would be returned to existing or improved condition following construction. Therefore, Alternative B would not convert Section 6(f) properties into a transportation facility.

Mitigation for Section 6(f) Property Impacts

All Section 6(f) properties would be avoided; therefore, no mitigation is required.

3.16 HAZARDOUS MATERIALS, SOLID WASTE, AND UNDERGROUND STORAGE TANKS

The RCRA (Resource Conservation and Recovery Act) (33 U.S.C 1241 et seq.) and CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act) (42 U.S.C. 9601 et seq.) regulate hazardous material, hazardous waste, or environmentally contaminated sites.

A hazardous waste survey was conducted to identify known and potential hazardous waste/materials sites and USTs (Underground Storage Tanks) within the project corridor²⁰. Records were reviewed according to Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM, 2000)²¹.

A single site has been officially considered and reviewed for Federal Superfund Status within one-mile (1.6 kilometers) of the proposed project site: Island at Rock Creek. The site is located at the eastern edge of Red Lodge between 8th and 16th Streets, on the east side of Rock Creek.

There is a single SWLF (Solid Waste Landfill) within 0.5-miles (0.8-kilometers) of the proposed project site. This SWLF is a closed Red Lodge City facility that is located at 900 Bonner Avenue, approximately 1,500 feet (450 meters) east of US Highway 212. This facility was closed in 1983 and reclaimed afterward (Tomisich, 2001). It is currently the location of the Beartooth Nature

²⁰ Hyalite Environmental, LLP., *Amended Initial Site Assessment Report, Red Lodge North Reconstruction* (Aug. 2002)

²¹ Additional records research on the Montana Natural Resource Information System was conducted in 2007. This resulted in the identification of one additional site, the Ski Station in Red Lodge, which is both a UST and LUST.

Center. This site is considered by the MDEQ to be a good example of reclamation and re-use of community lands.

Fifteen LUST (Leaking Underground Storage Tanks) sites have been identified adjacent to US Highway 212 or within 0.5-miles (0.8-kilometers) of the beginning of the proposed project in Red Lodge. See *Table 3.10, Leaking Underground Storage Tanks*.

Fourteen UST sites were identified adjacent to the proposed project. See *Table 3.11, Underground Storage Tanks*.

Table 3.10 Leaking Underground Storage Tanks			
Site Name	Site Location	Confirmed Release Date	Active Site
RED LODGE			
Anderson Conoco	910 W. Villard	22-Jul-88	No
Beartooth Electric Co-Op Inc	Box 1119 (1306 N. Broadway)	20-Jul-93	No
Carbon County Abstract Title Co	105 N. Broadway	24-Oct-89	No
Carter's Bulk Plant	Hwy 212	01-Aug-91	No
Ray Judd Ford	116 N. Broadway	07-Jul-99	Yes
Red Lodge Travel Center	403 S. Broadway	30-Jul-98	No
T & D Pump	Hwy 212	09-Dec-93	Yes
Cowger, Nick	Rte 1 Box 4165	12-Jun-91	No
Ransdell Union 76 Bulk Plant	Address Unknown	29-Jul-93	No
The Ski Station	510 N. Broadway Ave	09-Sept-06	Yes
ROBERTS			
Former Roberts Exxon	#1 Railroad Ave (Hwy 212)	22-Apr-97	Yes
Laurel Coop Assoc	Box 11 (Hwy 212)	30-Oct-90	No
Y-Stop	Box 85 (Hwy 212)	27-May-92	No
BOYD			
Boyd Country Store	Box 236 (Hwy 212)	11-Jun-93	No
Old West Trading Post	Box 128 (Hwy 212)	17-Dec-92	Yes

Table 3.11 Underground Storage Tanks				
Facility ID	Site Name	Site Location	Active Tanks	Non-Active Tanks
RED LODGE				
05-08860	Beartooth Electric Co-Op Inc	Box 1119 (1306 N. Broadway)		
05-03138	King Oil Co	N. Edge of Town		2
05-06961	Pony Express	401 N. Broadway	3	
05-01404	Red Lodge KOA	4 Mi. N. on Hwy 212		2
05-13924	Rock Creek North	902 N. Broadway	4	
05-04228	T & D Pump	Hwy 212	3	
05-04737	Old Town Square	410 N. Broadway		1
05-12391	Biorn, Terry	Waples Tracts		1
60-15056	The Ski Station	510 N Broadway Ave		3

Continued...

**Table 3.11
Underground Storage Tanks**

Facility ID	Site Name	Site Location	Active Tanks	Non-Active Tanks
ROBERTS				
05-06599	Y-Stop C Store	Hwy 212 & Cooney Rd S.	4	4
05-05374	Former Roberts Exxon	#1 Railroad Ave (Hwy 212)		1
05-04499	Town and Country Supply	Box 11 (Hwy 212)		2
05-08035	Wright, Dale	Rt 1 Box 2004		1
BOYD				
05-05710	Boyd Country Store	Box 236 (Hwy 212)		2

Impacts to Hazardous Materials, Solid Waste, and Underground Storage Tanks

Alternative A (No-Build): The no-build alternative would not impact hazardous materials, solid waste, or underground storage tank sites.

Alternative B (Preferred): It is unlikely that the proposed project would impact the Island at Rock Creek site or that impacts from the Island at Rock Creek site would affect the proposed project. Mine tailings, which may have impacted ground water at this site, characterize the site. It is also unlikely that the reclaimed SWLF would have impacts on the proposed project, or vice versa.

The LUST identified at the former Exxon station in Roberts may indirectly impact the proposed project. The identified plume appears to be down gradient of the roadway; however, groundwater is extremely shallow under the roadbed and excavation should be monitored. It is the responsibility of the Contractor to have any groundwater encountered sampled and analyzed for organic contaminants to determine safety, handling, and disposal measures. Additionally, a LUST, known as the Ski Station, was identified adjacent to the project corridor in Red Lodge. As a result of storm water improvements in Red Lodge, approximately 90 cubic yards (70 cubic meters) of material is anticipated to be removed along US Highway 212 near the Ski Station. However, coordination with MDEQ revealed that it is unlikely contaminated soil would be encountered during project construction. *See Appendix D, May 2007 Agency Scoping, Letter #4.*

Excavation activities could potentially expose or otherwise affect subsurface hazardous materials. Property owners and subsurface utility locators will be consulted during the design phase of the proposed project concerning the exact locations of the identified USTs to verify potential encounters with hazardous materials. MDT expects that the Contractor will ensure that hazardous materials discovered, generated or used during implementation of the project would be stored, handled, and disposed in accordance with applicable local, State, and Federal laws.

Mitigation for Hazardous Materials, Solid Waste, and Underground Storage Tank Impacts

If contaminated soils or hazardous materials are encountered during construction, excavation and handling will be done in accordance with local, State, and Federal laws. Impacts to hazardous materials, solid waste, and underground storage tanks are not anticipated; therefore, no mitigation is required.

3.17 VISUAL/AESTHETIC CONSIDERATIONS

The City of Red Lodge is preparing a Streetscape Plan for US Highway 212 between 15th Street and 8th Street, which would tie in to the southern terminus of the proposed project. MDT met with the City during the Streetscape planning process to discuss compatibility with both projects/plans. Design concepts for the Streetscape Plan include bulb-outs at intersections, decorative concrete, lighting, landscaping treatments, street furniture, and other concepts.

Visual/Aesthetic Impacts

Alternative A (No-Build): If no action were taken, there would not be visual/aesthetic impacts.

Alternative B (Preferred): The Preferred Alternative would improve aesthetics within Red Lodge. The four roundabouts between MT Highway 78 and Two Mile Bridge Road, proposed as part of the access management plan, would create a distinctive entrance into Red Lodge from the north, as supported in Red Lodge City Council Resolution No. 3228. Further, the proposed project would incorporate elements of the Red Lodge Streetscape Plan, as appropriate, which would improve aesthetics within the City. The proposed typical section from 8th Street to MT Highway 78 is expected to be compatible with the proposed typical section used by Red Lodge from 15th Street to 8th Street. The Preferred Alternative also includes a bulbed out curb line at 8th Street, which is consistent with the Streetscape Plan. MDT will work with the City to develop an agreement to address appropriate lighting and landscaping features to be incorporated into the project. The Red Lodge Streetscape Plan, available funding, and maintenance will be taken into consideration when developing the agreement.

Mitigation for Visual/Aesthetic Impacts

Adverse impacts to visual/aesthetics are not anticipated; therefore, no mitigation is required.

3.18 TEMPORARY CONSTRUCTION CONSIDERATIONS

During construction of the proposed project, specific impacts would occur directly as a result of construction activities. These include, but are not limited to, construction equipment noise, dust from delivery of materials through the local roadways, creation of borrow pits, and disposal of soil. The temporary construction impacts would not occur under the no-build alternative. An analysis of environmental factors affected by construction activities is described below.

3.18.1 Air Quality

Construction activities could have a short-term impact on air quality, primarily during site preparation. Dust is generated during earth moving activities and handling of cement, asphalt, or aggregate. Wind erosion of exposed areas and material stockpiles also generates particulate matter. The amount of dust generated would vary, depending on the construction activity and local weather conditions.

Additionally, construction activities may result in a temporary increase of carbon monoxide. These increases would be a result of slowed traffic due to detours, as discussed in 3.18.2, and slow-moving vehicles performing construction activities.

Mitigation for Temporary Air Quality Impacts

Where excess dust is anticipated to be a problem, effective dust control measures would be implemented in accordance with standard MDT procedures and applicable permit requirements. Dust control would be the responsibility of the contractor.

Federal and State laws regulate emissions from construction equipment. MDT would expect any burning of cleared materials to be conducted in accordance with applicable state and local laws, regulations, and ordinances. Projected traffic volumes are well below typical thresholds for vehicle emission air quality modeling.

3.18.2 Transportation System

Construction delays would likely create temporary impacts to local and regional traffic circulation in the project area due to lane closures, delays, temporary travel on unpaved surfaces, and reduced travel speeds. Traffic diversions and construction equipment and activities close to the travel lanes would also affect speeds and traffic operation within the construction zone. Disruptions to access and parking for business and residences located within the construction zone would occur.

Mitigation for Temporary Transportation System Impacts

A construction traffic control plan will be developed according to MDT Standard Specifications to include construction phasing devised to maintain two lanes of traffic and uninterrupted side road access along the corridor to the greatest extent practicable. The contractor will coordinate with emergency service providers and schools to solicit input for the construction traffic control plan to provide ongoing information during construction.

3.18.3 Water Resources/Quality

Rock Creek, Stanley Creek, and numerous irrigation ditches would be crossed by the proposed project, as described in Section 3.8.1.

Temporary impacts to water quality may result from construction. These may include an increased potential for erosion, reduced slope stability, and increased turbidity caused by disturbing waterway bottoms and re-suspending existing sediments in the water column. During storm events, an influx of fuel and other pollutants from unpaved surfaces could also occur. Increases in turbidity, suspended sediment, and other pollutants can reduce stream productivity and slow biogeochemical and natural purification processes.

Mitigation for Temporary Water Resources/Quality Impacts

The potential for temporary increases in turbidity and other water quality impacts resulting from construction activities would be reduced by the implementation of standard BMPs during construction, compliance with project-specific conditions to be specified in the permits and certifications required for the project (Montana Stream Protection Act; Federal Clean Water Act Section 404/401; MCA Title 75, Environmental Protection, Chapter 5, Water Quality), and compliance with MDT standard water pollution control specification (Section 208). In addition, temporary impacts to wetlands within the right-of-way and construction easement areas would be restored to original contours and re-vegetated at the earliest practicable date following construction.

3.18.4 Wildlife Habitat and Ecosystems

Construction of the project may result in minor indirect disturbance to wildlife communities. The survival of displaced species that relied exclusively within the limits of construction would depend on the carrying capacity of adjacent undeveloped habitat. Minimal impacts to nesting raptors or waterfowl may occur, though little nesting is expected in areas that would be directly impacted by construction. Additionally, construction activities may result in the invasion and/or spread of noxious weeds due to clearing and grubbing activities.

Increases in turbidity, suspended sediment, and other pollutants can reduce feeding opportunities for fish and result in fish avoidance of important habitat. Increased turbidity/suspended sediment may also block light transmission and slow biogeochemical and natural purification processes. Deposited sediments can also reduce habitat volume by filling pools and inter-gravel spaces that are critical to eggs and young fish. Finally, any construction activities in Rock Creek, Stanley Creek, or other water bodies could potentially disrupt fish spawning activity; however, substantive losses of spawning habitat for any fish species are not anticipated.

Mitigation for Temporary Wildlife Habitat and Ecosystems Impacts

In compliance with the Migratory Bird Treaty Act and MDT's most current depredation permit from the USFWS, vacated swallow or other songbird nests that may be directly impacted by construction would be physically removed by MDT staff or the contractor between the dates of September 1 and April 30. Deterrents such as screening or netting and/or Bird-X Repellent would be placed on existing structures (bridges or box culverts) as well as new structures under construction to be impacted by the project to discourage re-nesting until construction activities can be completed.

Disturbed areas would be reseeded and conducted in accordance with MDT Standard Specifications. Noxious weeds would be controlled by MDT, the County Weed Board, and the contractor. Furthermore, an erosion and sediment control would be prepared in accordance with Section 402 and MPDES (Montana Pollutant Discharge Elimination System) regulations.

3.18.5 Noise

Construction would result in temporary increases in noise levels within the vicinity of the project.

Mitigation for Temporary Noise Impacts

MDT Standard Specifications require that contractors comply with applicable laws and regulations to minimize noise impacts. As necessary, the contract will include additional requirements for projects located in or near urban areas.

3.19 UTILITIES

During construction, certain impacts to utilities may occur such as utility relocation or service interruption due to relocation. Overhead and underground power lines and underground telephone lines are located parallel to and on both sides of the existing alignment. The preliminary alignment has been adjusted as much as practical to avoid and minimize impacts to utilities. However, some relocation of these utilities will be required.

Mitigation for Utility Impacts

Utility relocations will be coordinated with appropriate line owner(s) and completed prior to project construction. Notification of service interruption due to relocation will be the responsibility of the appropriate utility line owner. Such disruptions are normally minor in nature, and are limited to the customers connected to the affected lines. In addition, rural overhead power lines that are relocated would be raptor proofed per MDT policy.

3.20 CUMULATIVE CONSIDERATIONS

Cumulative impacts result from the incremental consequences of an action “when added to other past, present, and reasonably foreseeable actions regardless of what agency or person undertakes such other actions” (40 CFR 1508.7). Effects of an action may be insignificant when evaluated in an individual context, but these effects can add to other disturbances and cumulatively may lead to a measurable environmental change. By evaluating the impacts of the proposed action with the effects of other actions, the relative contribution of the proposed action to a projected cumulative impact can be estimated.

The following discussion addresses the potential for cumulative impacts from the US Highway 212 project to numerous other projects and/or actions that have recently occurred, are presently occurring, or may be expected to occur in the reasonably foreseeable future along or near the project corridor. These include projects or actions undertaken by the City of Red Lodge, Carbon County, MDT, and private developers.

3.20.1 Past, Present, and Reasonably Foreseeable Actions

The following discussion focuses on past, present, and reasonably foreseeable future actions undertaken by or in the City of Red Lodge, by or in Carbon County, and by MDT near the project corridor.

The City of Red Lodge and Carbon County have experienced recent population growth and development pressure and expect this trend to continue over the next 15 years. The City and County are actively managing this growth with an emphasis on maintaining or improving the community character. This is evident in the Red Lodge Growth Policy (May 2001), the Carbon County Growth Policy (September 2003), and the City of Red Lodge Comprehensive Trails Plan (May 2006).

Red Lodge has several local roadway projects under consideration. These include the extension of MT Highway 78 from its intersection with US Highway 212 to the east to accommodate commercial development, construction of an alley access to accommodate the Red Lodge Ales Brewing Company south of 6th Street, and streetscape improvements along US Highway 212 from 8th Street to 15th Street.

Additionally, the Red Lodge City Planner provided MDT with information about planned developments along or near the project corridor. As described previously, these include the Beartooth Hospital, Bank of Red Lodge, and five housing subdivisions with a total of nearly 800 new housing units. The Carbon County Planning Director also provided information about planned developments between Red Lodge and Boyd. These included three housing subdivisions with a total over 220 new housing units.

Carbon County completed a sidewalk project in Roberts in 2005 that provided pedestrian facilities on First Street. Additionally, Carbon County Planning staff identified that there is a 159-unit and 40-unit subdivision planned north of Roberts.

MDT also has numerous roadway improvement projects planned near the project corridor. These include three projects on MT Highway 78 located northwest of Red Lodge, one project on MT Highway 72 located southeast of Red Lodge, and one project located on US Highway 212 located north of the project corridor, as summarized in the following sections.

- Red Lodge Safety Improvement Project. MDT has proposed a safety improvement project to address the crash trend at an accident cluster 5 miles (8.1 kilometers) northwest of Red Lodge on MT Highway 78. The accident rate at this cluster is 7.01 with a severity rate of 21.03. The cause of these accidents has been cars leaving the road on a sharp horizontal curve. MDT has proposed reconstructing the curve with a larger radius and flatter slopes. Additionally, the project is designed to meet geometric criteria such as providing stopping sight distance and route segment plan width. The anticipated letting for this project is 2008.
- MT Highway 78 Corridor Study. MDT has initiated a corridor planning process along the MT Highway 78 corridor, beginning about 5 miles (8.1 kilometers) northwest of Red Lodge and ending at the north end of Roscoe. This segment of MT Highway 78 does not meet current design and safety standards. The purpose of the project is to comprehensively address future transportation needs, prioritize future transportation projects, and foster cooperative state and local transportation planning efforts. The anticipated letting date is after 2011.
- Red Lodge Northwest Project. MDT plans to reconstruct a portion of MT Highway 78 in Carbon County to address the higher than average accident rate for this portion of the highway. The proposed work is to reconstruct approximately 5.1 miles (8.1 kilometers) of the existing roadway starting at the MT Highway 78 and US Highway 212 intersection and continuing northwest of Red Lodge. The purpose of the project is to increase the safety of the route and to provide a long-term quality highway. The anticipated letting date is after 2011.
- Belfry North Project. MDT prepared an EA and Nationwide Programmatic Section 4(f) Evaluation, and FHWA issued a Finding of No Significant Impact on June 17, 2005 for the 11.1-mile (17.9-kilometer) section of MT Highway 72 between Montana Secondary 308 in the town of Belfry and US Highway 310 south of the town of Bridger in Carbon County, Montana. The primary purpose of this project is to reconstruct MT Highway 72 to improve safety along the project corridor. The existing project corridor does not meet current MDT standards for a rural arterial highway. The anticipated letting date is after 2011.

- US Highway 212 Rockvale to Laurel Project. An EIS (Environmental Impact Statement) is being prepared for the reconstruction of US Highway 212 from Rockvale to Laurel. The purpose of the project is to reconstruct approximately 11.2 miles (18.0 kilometers) of US Highway 212 with added capacity to reduce congestion and the incidence and severity of accidents. The project is needed because this segment of US Highway 212 has several deficiencies and capacity limitations. The planning process for this project is anticipated to take about 7 years. A Draft EIS was approved by MDT and FHWA on October 31, 2007.

3.20.2 Cumulative Impacts

The proposed US Highway 212 project was developed in cooperation with Red Lodge and Carbon County. The proposed project is consistent with the Red Lodge and Carbon County Growth Policies and the City of Red Lodge Comprehensive Trails Plan. The roundabout proposed at MT Highway 78 would accommodate an extension of MT Highway 78 to the east. The proposed improvements at Oakes Avenue and 8th Street would accommodate the proposed Bank of Red Lodge and would not preclude the provision of alley access for the Red Lodge Ales Brewing Company. As appropriate, MDT will incorporate elements of the streetscape design that Red Lodge is proposing for US Highway 212 south of the project corridor into project design for consistency with aesthetic design. The proposed roundabout at the Two Mile Bridge Road intersection would accommodate the proposed Beartooth Hospital. Additional capacity along US Highway 212 is not anticipated to be needed to accommodate the proposed subdivisions in Red Lodge.

The proposed project would also complement the 2005 Roberts sidewalk project by including one block of new sidewalk to tie into the existing sidewalk, as well as crosswalks on US Highway 212. The proposed US Highway 212 project would realign the Clear Creek Road access to eliminate the offset intersection with the rest area approaches. This would improve safety conditions at this intersection.

The proposed project would not directly impact the other MDT projects. Cumulatively, these projects would all improve the safety and operational characteristics of the local and regional transportation system.

Following is a discussion about potential cumulative environmental impacts associated with the proposed projects and the other actions discussed previously.

Land Use — The proposed US Highway 212 project would accommodate the land use changes near the project corridor, but it is not driving these changes. Although some new right-of-way would be needed for the corridor, the project would improve the roadway on its existing alignment. The project is not intended to induce additional traffic since there is not additional capacity nor is it expected to change growth patterns. The additional traffic anticipated as a result of the past, present, or reasonably foreseeable developments would be accommodated and managed by the proposed project, rather than induced. Therefore, the contribution of the proposed project to land use changes associated with other actions is not expected to be significant.

Farmland — As Red Lodge and Carbon County continue to experience increased population and development pressure, farmland will continue to be converted to other uses, primarily residential and commercial. The proposed project would require some additional right-of-way,

impacting farmland; however, these impacts would occur adjacent to the existing roadway corridor. In addition, through coordination with NRCS, the impacts to farmland as a result of the US Highway 212 project have been determined to be not significant. Moreover, the contribution of the project to the loss of farmland associated with other actions is not expected to be significant.

Right-of-way and Relocations — The proposed project would require additional right-of-way to accommodate the proposed improvements and provide the MDT standard right-of-way width for the facility type. The proposed project may also result in the acquisition and/or relocation of up to nine structures, including six residences, two outbuildings, and a commercial building. Other MDT projects in the region may also require right-of-way and/or require relocations. However, most roadway projects involve improvements on roadways that have been in place for many years. MDT attempts to minimize impacts to adjacent properties and does provide compensation for unavoidable impacts. Therefore, cumulative right-of-way and relocation impacts are not expected to be significant.

Traffic — Development and roadway projects are actions that can lead to increased traffic and/or changes in traffic patterns. Traffic generation from these past, present, and reasonably foreseeable projects was included for the projected traffic volumes for the proposed project.

Pedestrian and Bicycle Considerations — The proposed project would provide wider shoulders in the rural segments; usable shoulders, sidewalks, a shared bike/ped path, and crosswalks, as appropriate, in Red Lodge; and a sidewalk and crosswalks in Roberts. The proposed project, other improvements proposed in the *Red Lodge Comprehensive Trails Plan*, and the Roberts sidewalk project completed in 2005 cumulatively improve the non-motorized transportation system along and near the project corridor.

Water Quality — Water quality impacts resulting from the proposed project are expected to be minor and will be minimized through the use of BMPs during construction. Road construction and development activities can be contributing factors to increased areas with hard surfaces, such as pavements and buildings. The increased hard surface areas reduce the amount of precipitation that can infiltrate into the ground and increase the amount of precipitation that runs off. The proposed project is expected to contribute to the increase in runoff by creating a wider roadway section. Additional urbanization along the corridor is expected to occur due to ongoing and foreseeable development, particularly in north Red Lodge, and this urbanization is also expected to contribute to the increase in runoff.

The design of the project would accommodate the increased runoff by directing it to natural drainage areas. The project would also reduce the flooding potential for Roberts by incorporating measures that would reduce the amount of runoff that reaches the community from the south. The cumulative impacts of this project would be minor compared to the runoff from the existing roadway and compared to the runoff from the total drainage basin. Therefore, the cumulative effect to water quality would not be significant, when added to the impacts from other development in the area.

Wetlands — Cumulative impacts have occurred and are occurring in Carbon County due to land conversion. Growth in the project area has substantially increased, as discussed in Section 3.3, Land Use, and a number of new developments are planned adjacent or near the project corridor. The proposed project is not anticipated to contribute substantially to the cumulative loss of wetlands in Carbon County due to MDT and FHWA's commitment to avoidance and

minimization of wetland impacts during design, and the development of compensatory wetland mitigation where impacts are unavoidable, in accordance with Executive Order 11990 and Section 404 of the Clean Water Act.

Wildlife — Construction noise, habitat loss or fragmentation, and AVC attribute to impacts to wildlife. However, the project is located on an existing roadway and it is likely that suitable habitat exists outside the project corridor. Additionally, a goal of the proposed project is to minimize the potential for AVC in the project area. Therefore, the cumulative effect to habitat would not be significant, when added to the impacts from other development in the area.

Visual/Aesthetics — The proposed project, combined with the Red Lodge Streetscape Plan, would provide a cumulative aesthetic benefit to Red Lodge.

Other environmental considerations, such as floodplains, threatened and endangered species, cultural resources, Section 4(f) and 6(f) properties, and hazardous materials, are not anticipated to be directly or indirectly impacted by the proposed project, as discussed previously; therefore, they are not anticipated to be cumulatively impacted by the proposed project when coupled with one or more of the aforementioned projects.

3.21 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

As with any construction project, certain irreversible and irretrievable commitments of natural resources, manpower, materials and fiscal resources are required. Fossil fuels, labor, and highway construction materials such as cement, aggregate, and bituminous material would be expended to complete the project. Additionally, labor and natural resources would be used in the fabrication and preparation of construction materials. These materials are generally not retrievable. However, they are not in short supply, and their use would not have an adverse effect on the availability of these resources. Construction would also require a one-time expenditure of State and Federal funds, which are not retrievable. However, the anticipated beneficial effects would balance the irretrievable commitment of resources caused by construction of the Preferred Alternative.

3.22 SHORT-TERM IMPACTS VERSUS LONG-TERM BENEFITS

The local, short-term impacts and use of resources inherent with the Preferred Alternative would be consistent with the maintenance and long-term functionality of US Highway 212 from Red Lodge to north of Boyd. Short-term impacts would include temporary delays, increased dust, noise, wildlife disruption, and water quality impacts associated with construction. Long-term benefits of the build alternative are related to having a safe, reliable transportation corridor. Such benefits include improving the safety and operational characteristics of the roadway by:

- Improving the pavement condition along the project corridor by reconstructing the roadway with new asphalt pavement.
- Improving the intersection geometry at key locations along the corridor.
- Incorporating an Access Management Plan for Red Lodge, which was supported by the Red Lodge City Council in March 2007. *See Appendix A, Letter #8.*
- Providing pedestrian and bicycle facilities in Red Lodge.
- Providing wider roadway shoulders in rural segments where appropriate.
- Flattening ditch slopes in rural segments where appropriate.
- Reducing clear zone encroachments in rural segments where appropriate.
- Providing increased snow storage with wider and deeper roadside ditches.

- Clearing thick brush and trees within the clear zone to increase motorist visibility of approaching wildlife.
- Providing turning lanes where needed to reduce differential speed conflicts.
- Improving highway-related storm water drainage in Red Lodge and Roberts.

3.23 PERMITS AND AUTHORIZATIONS

The following permits and authorizations are likely to be required prior to construction:

- CWA Section 402/MPDES authorization from MDEQ Permitting and Compliance Division. The MPDES permit requires a storm water pollution prevention plan that includes a temporary erosion and sediment control plan. The erosion and sediment control plan identifies BMPs, as well as site-specific measures to minimize erosion and prevent eroded sediment from leaving the work zone.
- CWA Section 404 permit from the USACE for any activities that may result in the discharge or placement of dredged or fill materials in waters of the US, including wetlands.
- Montana Stream Protection Act (SPA 124) from the MFWP-Fisheries Division. The Montana SPA 124 is required for projects that may affect the bed or banks of any stream in Montana.
- Short-Term Water Quality Standard for Turbidity related to construction activity (318 Authorization) from the MDEQ-Water Quality Bureau for any activities that may cause unavoidable violations of state surface water quality standards for turbidity, total dissolved solids, or temperature.
- Floodplain Development Permit from the County Floodplain Administrator.

3.24 ENVIRONMENTAL COMMITMENTS/MITIGATION

The following commitments have been made by MDT:

- MDT will attempt to meet individually with the affected property owners to discuss potential property acquisition and/or relocation impacts. MDT will make reasonable efforts to avoid and/or minimize impacts to potentially affected property owners.
- MDT will consult with affected irrigation ditch associations and other landowners/water rights holders to minimize impacts to irrigation facilities.
- If the mound septic system were impacted, MDT would relocate the system per County and MDEQ requirements.
- MDT recognizes the high frequency of AVC along the project corridor and will make a good faith effort to incorporate appropriate mitigation measures into the project design.

See Table A, Summary Comparison of Project Alternatives and Impacts, on page S-8.

Chapter 4 Section 4(f) Evaluation

4.1 INTRODUCTION

The purpose of this chapter is to evaluate the potential impacts of the Preferred Alternative, as discussed in Chapter 2, to Section 4(f) properties per 49 U.S.C. § 303. The Preferred Alternative was carried forward in this EA to meet the need of the proposed project, as discussed further in Chapter 1, by improving the safety and operational characteristics of the roadway.

4.2 SECTION 4(f) PROPERTIES

Section 4(f) of the Department of Transportation Act of 1966, as codified in the 49 U.S.C. § 303, specifies that the Secretary shall not approve any program or project that requires the use of publicly owned land from a public park, recreation area, wildlife or waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance, as determined by the officials having jurisdiction thereof, unless (1) there is no feasible or prudent alternative to the use of such land, and (2) such program or project includes all possible planning to minimize harm resulting from the use.

A Section 4(f) impact, or “use,” refers to a permanent, temporary, or constructive use as defined in the FHWA/FTA regulations at 23 CFR 774 Parts 15 and 17. These uses are defined as follows:

- *Permanent Use* — Land from a 4(f) property is permanently incorporated into a transportation facility.
- *Temporary Use* — There is an adverse temporary occupancy of the 4(f) property.
- *Constructive Use* — The proximity impacts of a project on the 4(f) property are so severe that the activities, features or attributes that qualify the property or resource for protection under Section 4(f) are substantially impaired/diminished.

Section 4(f) properties along the project corridor consist of historic properties, historic irrigation ditches, and recreation areas.

4.2.1 Historic Properties

There are 19 historic properties along the project corridor, excluding historic irrigation ditches, as discussed in Chapter 3, Section 3.14.

On August 10, 2005, Section 6009(a) of SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users) amended existing Section 4(f) legislation to simplify and streamline the process for projects having only *de minimis* impacts on Section 4(f) properties. Under the new provisions, once the US DOT determines that a transportation use of Section 4(f) property results in a *de minimis* impact, analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete. An impact to a historic site may be determined to be a *de minimis* impact if the following criteria are met:

1. The process required by Section 106 of the National Historic Preservation Act results in the determination of “no adverse effect” or “no historic properties

- affected" with the concurrence of the SHPO and/or THPO, and ACHP if participating in the Section 106 consultation;
2. The SHPO and/or THPO, and ACHP if participating in the Section 106 consultation, is informed of FHWA's or FTA's intent to make a de minimis impact finding based on their written concurrence in the Section 106 determination; and
 3. FHWA or FTA has considered the views of any consulting parties participating in the Section 106 consultation.

Impacts to Historic Properties

Alternative A (No-Build): If no action were taken there would be no impacts to historic properties. Therefore, there would be no impacts to Section 4(f) properties.

Alternative B (Preferred): The Preferred Alternative would result in a de minimis Section 4(f) use of four historic properties: Carnegie Library, Kent Dairy Round Barn, Boyd Country Store, and the Rocky Fork Branch of Northern Pacific Railroad.

The development of the Preferred Alternative included efforts to avoid and minimize impacts to Section 4(f) properties. The Preferred Alternative would avoid impacts to the Carnegie Library structure and minimize/mitigate impacts to the Carnegie Library property, as described below:

- The Carnegie Library building would be avoided with the use of a bulbed out curbline at the 8th Street/US Highway 212 intersection.
- A sidewalk would be added on the east and west sides of US Highway 212 from 8th Street to the north; this would improve pedestrian access to the Library.
- Additional public parking spaces would be added on the west side of the Library along Oakes Avenue, which would improve vehicular access to the Library.
- The existing Mountain Ash tree on the southeast corner of the Library property would be avoided; however, the sign may need to be relocated.
- MDT will work with Carnegie Library representatives during project design to determine an appropriate treatment for the triangular area on the north end of the property (such as planting with grass seed).

MT SHPO concurred with MDT's determination of *No Adverse Effect* to the Carnegie Library site.

The Preferred Alternative would avoid impacts to the Kent Dairy Round Barn structure and minimize impacts to the property. Right-of-way impacts would be minimized with the use of a buried storm water pipe rather than an open ditch at this location. MT SHPO concurred with MDT's determination of *No Effect* to this site.

The Preferred Alternative would avoid impacts to the Boyd Country Store and minimize right-of-way impacts to this property. At this location, highway-related storm water drainage would be diverted to the west side of the roadway, eliminating the need for a full ditch on the east side of the roadway. In addition, a reversed curb would be used to delineate the Boyd Country Store parking lot from the roadway. This would improve the safety and functionality of the parking lot. A temporary construction easement would be required at this location to facilitate construction. Additionally, existing easements currently being used for transportation purposes would be incorporated into permanent right-of-way. However, the temporary construction easement would

be extinguished following construction and would not be incorporated into permanent right-of-way. MT SHPO concurred with MDT's determination of *No Effect* to this site.

Additionally, the Preferred Alternative would impact the Rocky Fork Branch of the Northern Pacific Railroad in approximately eight locations. Impacts at four of these locations would be due to relocation of irrigation ditches outside of the proposed right-of-way per standard MDT procedures. At two locations, the impact would be a result of the construction of the highway ditch. One location would be impacted by the addition of a northbound passing lane. Lastly, one location would be impacted by installation of a new culvert under the railroad bed to improve storm water drainage for the community of Roberts. The site consists of approximately 22 acres, of which approximately 3.2 acres would be disturbed by the Preferred Alternative.

This site has already been significantly impacted. The bridges, rails, ties, ballast, and associated features have been long removed from the line. Also, segments of the line have been converted into local access roads, residential developments have encroached on the line, and lack of maintenance has led to deterioration of the line's integrity. The minor impacts from the Preferred Alternative would not substantially alter the railroad line's historical integrity, as it has already been significantly impacted. SHPO determined that the Preferred Alternative would have *No Adverse Effect* to the railroad.

The remaining 15 historic properties in the project corridor would be avoided by the Preferred Alternative; therefore, they would not have a Section 4(f) use.

Mitigation for Historic Property Impacts

The Carnegie Library, Kent Dairy Round Barn, Boyd Country Store, and Rocky Fork Branch of the Northern Pacific Railroad would all have de minimis Section 4(f) impacts and would not require further mitigation measures. See *Appendix G, Section 4(f) De Minimis Evaluations*. Additionally, to avoid impacts at the Richardson Bungalow and MT Dakota Grain Elevator, the width of the border strip between the road and sidewalk was reduced and no further mitigation measures would be required. The remaining 13 historic properties would have no Section 4(f) use; therefore, no mitigation is required.

4.2.2 Historic Irrigation Ditches

There are 11 historic irrigation ditches along the project corridor: Bernhardt, Brandt, Carbonado, Drakes, Duncan-Aiken, Highline, Hoyle, Hunts, Rooney, Rule-Thompson, and Ward Ditches.

Impacts to Historic Irrigation Ditches

Alternative A (No-Build): If no action were taken, there would be no impacts to historic irrigation ditches.

Alternative B (Preferred): The Preferred Alternative would require the relocation of ten historic irrigation ditches outside the proposed right-of-way: Brandt, Carbonado, Drakes, Duncan-Aiken, Highline, Hoyle, Hunts, Rooney, Rule-Thompson, and Ward. The Bernhardt Ditch is not located within the proposed right-of-way and would not require relocation; therefore, there would be no Section 4(f) use to the Bernhardt Ditch.

Mitigation for Historic Irrigation Ditch Impacts

The 10 impacted historic irrigation ditches would all have de minimis Section 4(f) impacts and would not require further mitigation measures. See *Appendix G, Section 4(f) De Minimis Evaluations*.

4.2.3 Recreation Areas

There are six recreation areas along the project corridor. These include four fishing access sites, a fishing trail, and a school playground. The four fishing access sites (Horse Thief Station, Beaver Lodge, Bull Springs, and Water Birch) are owned and operated by the MT FWP. All of the fishing access sites are located outside the proposed right-of-way; however, access to these sites is from US Highway 212.

Additionally, Roberts Public School is located along US Highway 212 on the north end of Roberts. The school playground is open to the public and serves either organized or recreational purposes (walk-on activity).

The Rock Creek Fishing Trail is located in the Roberts to Boyd project segment. The trail is approximately 300 feet (91.4 meters) in length, from the rest area parking lot to Rock Creek. The Magic City Fly Fishers built and maintains the trail in cooperation with MT FWP and MDT.

Impacts to Recreation Areas

Alternative A (No-Build): If no action were taken, there would be no Section 4(f) use of the recreation areas along the project corridor.

Alternative B (Preferred): The Preferred Alternative would have no Section 4(f) use of the Beaver Lodge, Bull Springs, Horse Thief, Water Birch fishing access sites and the Rock Creek Fishing Trail. In order to avoid the Roberts Public School playground, the typical section along the school was altered to include a guardrail and 2:1 ditch slopes. Therefore, there would be no Section 4(f) use of the playground.

Mitigation for Recreation Area Impacts

There would be no Section 4(f) use of the fishing access sites, fishing trail, or school playground; therefore, no mitigation is required.

Chapter 5 Preparers and Reviewers

5.1 INTRODUCTION

The names and qualifications of the principal persons contributing information to the EA are identified in this chapter. In accordance with Part 1502.6 of the CEQ (Council on Environmental Quality) regulations for implementing the NEPA (National Environmental Policy Act), an interdisciplinary team of planners, environmental scientists, and engineers completed this detailed study.

5.2 PREPARERS AND REVIEWERS

This EA was prepared by KL&J under a contractual agreement with MDT. Listed below are those individuals with primary responsibility for preparation of this EA. See *Table 5.1, Preparers and Reviewers*.

Table 5.1 Preparers and Reviewers		
Team Member	Affiliation	Role
PREPARERS		
Mike Wamboldt, PE, Project Manager	KL&J	Project Development, Senior Review
Charlotte Brett, Environmental Planner	KL&J	Environmental Assessment Development
Craig Kubas, PE	KL&J	Preliminary Engineering, Roadway Geometrics
Chad Petersen, PE	KL&J	Preliminary Engineering, Roadway Geometrics
Mark Peterson, PE	KL&J	Hydraulics/Hydrologic Analysis
Becky Rude, Environmental Planner	KL&J	Impact Analysis
Robert Shannon, PE, Senior Engineer	KL&J	Alternatives Analysis, Traffic Analysis
Skip Skattum, GIS Analyst	KL&J	Impact Analysis, Noise Analysis, Exhibit Creation
Donovan Slag, PE	KL&J	Preliminary Engineering, Traffic Analysis
Lauri Travis, Ph.D.	Metcalf Archaeological Consultants, Inc.	Cultural Resource Survey
Joan Brownell	Independent Contractor	Historic Inventory
John Morrison	Earthworks	Cultural Resource Survey
Carol K. Lee-Roark, Ph.D., PG	Hyalite Environmental, LLP	Hazardous Materials Survey
Jeff Berglund, Senior Wetland Scientist	PBS&J / Land and Water Consulting, Inc.	Biotic & Wetland Surveys

Continued...

**Table 5.1
Preparers and Reviewers**

Team Member	Affiliation	Role
REVIEWERS		
Alan C. Woodmansey, PE	FHWA	Operations Engineer, Lead Agency
Ted Burch	FHWA	Project Development Team Lead
Tom S. Martin, PE	MDT	Bureau Chief, Senior Review
Gabe Priebe, PE	MDT	Consultant Design Project Manager
Heidy Bruner, PE	MDT	EA Review
Tom Gocksch, PE	MDT	Environmental Project Development Engineer, EA Review
Bill Semmens	MDT	Wetlands and Wildlife Impacts, EA Review
Cora Helm	MDT	Noise and hazardous materials, solid waste, and underground storage tank impacts, EA Review
Jon Axline	MDT	Cultural Resource/Section 4(f) Impacts, EA Review
Stefan Streeter, PE	MDT	Billings District Administrator
Gary Neville	MDT	Billings District Engineering Services Supervisor

Chapter 6 Comments and Coordination

6.1 INTRODUCTION

This chapter provides information about the coordination efforts with agencies and interested parties, which have been ongoing through the development of this EA.

6.2 COOPERATING AGENCIES

The City of Red Lodge and Carbon County are both cooperating agencies for this project. MDT has coordinated with Red Lodge and Carbon County throughout the development of the project. Both cooperating agencies have sent written correspondence identifying needs along the project corridor, which MDT has addressed with the Preferred Alternative. See *Appendix A, Cooperating Agencies*.

In addition to the written correspondence, MDT has held numerous meetings with the cooperating agencies, as summarized in the following section.

6.2.1 Meetings with the City of Red Lodge

MDT held an Alignment and Grade review meeting with the City of Red Lodge on March 28, 2003 at the Carbon County Courthouse in Red Lodge. The meeting consisted of an overall project review followed by discussion of proposed alternatives and options and a review of the alignment and grade plan set. Nineteen people attended the meeting.

On February 25, 2005, MDT met with the City of Red Lodge to discuss preliminary design concepts for the project corridor within Red Lodge. At that meeting, the City Administrator expressed interest in the concept of a roundabout at the Highway 78 intersection.

MDT met with Red Lodge again on June 28, 2006 to update the City Council on alternatives being considered within Red Lodge. At this meeting, previous alternatives and options that had been evaluated were summarized, along with the current preferred alternative. The City Council had various questions and comments about the preferred alternative; following the meeting, the Red Lodge City Planner indicated that the City wished to see other options for managing access in the developing area in north Red Lodge as well as for Oakes Avenue.

On August 10, 2006, MDT met with the Red Lodge City Planner and the Red Lodge Public Works Director. The primary purpose of this meeting was to discuss Oakes Avenue, access management in north Red Lodge, and potential impacts to land use development in north Red Lodge.

MDT met with the City of Red Lodge, CTA Architects Engineers, and other interested parties on January 18, 2007 to discuss the ongoing Red Lodge Streetscape Plan and its compatibility with this proposed project.

Following two public meetings to discuss access management in north Red Lodge (discussed further below), MDT met with the Red Lodge City Council on February 27, 2007. MDT presented the Access Management Plan to the Council and requested approval of the plan.

On June 27, 2008, MDT met with the City of Red Lodge to discuss the City's comments on the Administrative Draft EA.

6.2.2 Red Lodge Resolutions

The City of Red Lodge passed Resolution No. 3223 on October 10, 2006. This resolution identified support for the preferred alternative within Red Lodge, with the exception of the method of access management proposed for the developing area in north Red Lodge (at that time, a TWLTL was proposed).

Following the development of the Access Management Plan, the City of Red Lodge passed Resolution No. 3228 on March 27, 2007. This resolution identified support for the preferred alternative within Red Lodge.

6.2.3 Meetings with Carbon County

On March 1, 2007, MDT held an informational meeting with the Carbon County Commission and interested members of the public to talk about the proposed improvements in Boyd.

MDT held a follow-up meeting with the Carbon County Commission on March 29, 2007. The purpose of this meeting was to further discuss the Dakota Avenue intersection in Boyd.

6.3 COORDINATION WITH OTHER AGENCIES, ORGANIZATIONS, AND INTERESTED PARTIES

To ensure that social, economic, and environmental impacts are considered in the development of the EA, and pursuant to Section 102 (2) (D) (IV) of NEPA, MDT has also coordinated with other agencies, organizations, and interested parties throughout the development of the EA.

In March 2002, MDT mailed a scoping package to numerous local, State, and Federal agencies to determine the consistency of the project with current and proposed plans, programs, and policies. Their letters provided valuable insight into the evaluation of potential environmental impacts. Their instructions were referenced and incorporated where appropriate within the environmental impact categories in the previous chapter. *See Appendix C, March 2002 Agency Scoping.*

Due to modifications in the proposed project and the passage of time, agencies and interested parties were solicited again in May 2007. This time, agencies were asked to provide updates or further information regarding the proposed project. *See Appendix D, May 2007 Agency Scoping.*

The following agencies were consulted concerning potential impacts from the proposed project. *See Table 6.1, Agencies Consulted.*

**Table 6.1
Agencies Consulted**

Federal
U.S. Army Corps of Engineers <ul style="list-style-type: none"> • Helena Regulatory Office • Omaha District Planning Branch
U.S. Department of Agriculture <ul style="list-style-type: none"> • NRCS (Natural Resource Conservation Service)
U.S. Department of the Interior <ul style="list-style-type: none"> • Bureau of Indian Affairs/Environmental Services • Fish & Wildlife Service/Ecological Service
U.S. Environmental Protection Agency, Region VIII <ul style="list-style-type: none"> • Montana Operations Office • National Environmental Policy Act Unit
State
Montana Department of Environmental Quality <ul style="list-style-type: none"> • Director's Office • Permitting and Compliance Division • Remediation Division • Water Protection Bureau
Montana Department of Fish, Wildlife & Parks <ul style="list-style-type: none"> • Fisheries Division • Parks Division • Region 5 Headquarters
Montana Department of Natural Resource Conservation <ul style="list-style-type: none"> • Southern Land Office • Special Use Management Bureau • State Water Projects Bureau • Water Resources Division
Montana State Library <ul style="list-style-type: none"> • Natural Heritage Program
Regional
Rock Creek Irrigation Commission
County
Carbon County Clerk
Carbon County Commissioners
Carbon County School Superintendent
Carbon County Sheriff
Carbon County Treasurer
Municipality
Red Lodge City Clerk
Red Lodge City Council
Red Lodge Director of Public Works
Red Lodge Fire Department
Red Lodge Mayor
Red Lodge Planning and Zoning
Red Lodge Park Board

Continued...

Table 6.1 Agencies Consulted	
Municipality	
	Red Lodge Police
	Roberts School Board
Private	
	BNSF Railway Company
	Consolidated Ditch Company
	Finn Ditch Company
	Montana Land Reliance
	Red Lodge Chamber of Commerce
	Rock Creek Water Users

6.4 COORDINATION WITH THE PUBLIC

MDT attempts to provide accommodations for any known disability that may interfere with a person participating in any service, program, or activity of the Department. Alternative accessible formats of public meeting materials were made available if requested and reasonable accommodations were provided if the request was made within 48 hours of a meeting.

6.4.1 Kickoff Meeting

MDT held a public Kickoff Meeting at 6:30 p.m. on March 27, 2002 at the Red Lodge Senior Center in Red Lodge. Notice of the meeting was given to the City, County, and State officials by letter. The meeting was also advertised once per week for two consecutive weeks prior to the meeting date in the Billings Gazette and the Carbon County News. Additional news releases were circulated to local television and radio stations. The intent of this meeting was to inform elected officials and local, State, Federal, and regional agencies, as well as the public, of the project and to obtain local knowledge of concerns related to the proposed study. This meeting also served as an early notification of the preparation of an EA.

Forty-three members of the community and government agencies attended the meeting. Fifteen written comments were received concerning the project; the majority of which included requests for pedestrian and bicycle facilities in Red Lodge and a wider roadway. In general, public comments identified the desire for improved safety and traffic operations along the project corridor.

6.4.2 Alternatives Public Workshop

MDT held an Alternatives Public Workshop at the Roberts School Cafeteria in Roberts on November 6, 2002 at 6:00 p.m. This meeting was held to inform the public of alternatives being considered for the project and to obtain public input. Notice of the meeting was given, as before, to the City, County and State officials by letter. The meeting was again advertised once per week for two consecutive weeks prior to the meeting date in the Billings Gazette and the Carbon County News. News releases were also circulated to local television and radio stations.

Twenty-five people attended the Alternatives Public Workshop. Twelve written comments were received; the majority of which again included requests for a wider roadway.

6.4.3 Storm Water Drainage Meetings in Roberts

During the project planning process, MDT received public comments from property owners residing in the community of Roberts regarding concerns for highway-related storm water drainage. Comments of this nature were received throughout the development of the EA, primarily in response to flooding in Roberts in May 2005 and June 2007. MDT held two public information meetings regarding this issue. The first was held at the Roberts Public School gymnasium on May 16, 2006 at 7:00 p.m. The second meeting was held at the United Methodist Church in Roberts on December 18, 2007 at 6:30 p.m. The meetings were held to discuss the proposed improvements to highway-related storm water drainage along the project corridor in Roberts. Notices were posted in the Carbon County News prior to the meetings. Twenty-seven people attended the first meeting, and three written comments were received following the meeting. Approximately 25 people attended the second meeting, and no written comments were received.

6.4.4 Access Management in North Red Lodge – Meeting #1

MDT held a property owner meeting at the Red Lodge Senior Center on November 14, 2006 at 6:30 p.m. This meeting was held with potentially affected property owners to discuss current and future access needs from MT Highway 78 to Two Mile Bridge Road. Notice of the meeting was given to the City, County, and State officials and potentially affected property owners by letter. In addition, phone calls were placed to property owners notifying them of the meeting. The meeting was advertised prior to the meeting date in local newspapers.

Ten members of the public and government agencies attended the meeting. One written comment was received. The comment suggested half access between the developed limits of Red Lodge and Two Mile Bridge Road along with considerations for aesthetics, speed limit, and maintenance.

6.4.5 Access Management in North Red Lodge – Meeting #2

MDT held a second meeting regarding access management in north Red Lodge at the Red Lodge Senior Center on January 17, 2007 at 6:00 p.m. The purpose of the meeting was to present potential alternatives for access management along MT Highway 78 to Two Mile Bridge Road and to solicit public feedback. As before, a letter of notification was given to the City, County, and State officials and potentially affected property owners. The meeting was advertised for two consecutive weeks prior to the meeting date local newspapers.

Twenty-three members of the public and government agencies attended the meeting. Five written comments were received. Comments included suggestions for roundabouts, median options, access management, and speed limits.

6.4.6 Other Meetings

On January 31, 2007, MDT held a meeting with the architect working with the City of Red Lodge on the remodeling and layout for the new Bank of Red Lodge adjacent to the Oakes Avenue intersection. Others in attendance were the Red Lodge City Planner and other interested parties in the new development. The purpose of the meeting was to discuss when the US Highway 212 project would be constructed, the amount of right-of-way required for the proposed project, and possible layouts for the bank site plan. No written comments were received, but the preferred alternative reflects the discussion at this meeting.

On February 16, 2007, MDT held a meeting at the Billings District office with the owners and representatives of the proposed Beartooth Hospital, located north of the golf course in Red Lodge. The meeting was an effort to coordinate the proposed US Highway 212 project and right-of-way requirements with the future site plan of the Beartooth Hospital. No written comments were received, but the preferred alternative reflects the discussion at this meeting.

A meeting was also held with the Red Lodge Fire Department to discuss access for fire trucks between the Fire Station and the proposed roundabout at the MT Highway 78 and US Highway 212 intersection.

6.4.7 Public Hearing

Two Public Hearings are planned for this project, one in Red Lodge and the other in Roberts. A Notice of Availability of the EA and Public Hearing dates will be advertised in local newspapers.

Chapter 7 Reference List/Source Documents

7.1 INTRODUCTION

This chapter provides information on subconsultant, community plans/policies, websites and other source documents relied upon in the development of this EA.

7.2 SUBCONSULTANT REPORTS

The following subconsultant reports were prepared for this EA:

- Hyalite Environmental, LLP. *Initial Site Assessment Report, Red Lodge North Reconstruction* (Dec. 2001)
- Land & Water Consulting, Inc. *Red Lodge-North Final Biological Resources Report* (April 2004)
- PBS&J / Land & Water Consulting, Inc. *Red Lodge-North Final Biological Resources Supplement* (Anticipated Oct. 2007)
- Historical Research Associates, Inc. *Report of a Cultural Resource Inventory of the Red Lodge-North Project Corridor, Along Highway 212 in Carbon County, Montana* (Feb. 1997)
- Metcalf Archaeological Consultants, Inc. *Red Lodge North, Highway 212 Improvements: A Cultural Resource Inventory from Roberts to Boyd, Carbon County, Montana* (Oct. 2002)
- Joan Brownell. *Historic Inventory: Red Lodge North Project, Carbon County, Montana; Project STPP 28-2 (25) 70* (Feb. 2003)
- Earthworks, Inc. *Highway 212 Red Lodge North: A Cultural Resource Inventory, Carbon County, Montana* (June 2007)

7.3 OTHER REPORTS

The following reports were relied upon in the development of this EA:

- Kadrmas, Lee & Jackson. *Alignment and Grade Traffic Plans* (Nov. 2002)
- Kadrmas, Lee & Jackson. *Location Hydraulic Study Report* (Nov. 2002)
- Kadrmas, Lee & Jackson. *Preliminary Traffic* (Nov. 2002)
- Kadrmas, Lee & Jackson. *Preliminary Hydraulic Report Revised* (Feb. 2003)
- Kadrmas, Lee & Jackson. *US Highway 212 Traffic Study, STPP 28-2(25)70 Control #4375* (March 2004)
- Montana Department of Transportation. *US 212 – Red Lodge to Laurel: Speed Limit Investigation* (Dec. 2003)
- Montana Department of Transportation. *Corridor Study – Red Lodge North Collision Analysis: January 1, 1992 to December 31, 2001* (2001)
- Romin, L.A. and J.A. Bissonnette. *Deer-vehicle collisions: Status of state monitoring activities and mitigation efforts*. Wildlife Society Bulletin 24 (2):276-283 (1996)
- Southern Rockies Ecosystem Project. *Linkage Assessment Methodology, Linking Colorado's Landscapes Phase II Report*. Southern Rockies Ecosystem Project. Denver, CO (2006)

7.4 COMMUNITY PLANS/POLICIES

The following community plans/policies were relied upon in the development of this EA:

- *City of Red Lodge Comprehensive Trails Plan* (May 2006)
- *Carbon County Growth Policy* (Sept. 2003)
- *Red Lodge Growth Policy* (May 2001)
- Red Lodge City Council. *Resolution 3223* (Oct. 2006)
- Red Lodge City Council. *Resolution 3228* (March 2007)

7.5 WEBSITES

To obtain this EA online and comment on the EA, please visit the following address:

http://www.mdt.mt.gov/pubinvolve/eis_ea.shtml.

The following websites were also used to compile this EA:

- <http://www.co.carbon.mt.us/> (Carbon County)
- <http://www.cityofredlodge.com/> (City of Red Lodge)
- <http://redlodgestreetscape.com/> (Red Lodge Streetscape Project)
- <http://www.carnivoresafepassage.org/> (Carnivore Safe Passage)
- <http://www.epa.gov/enviro/> (EPA Envirofacts Data Warehouse)
- <http://www.deq.state.mt.us/> (MDEQ)
- <http://nhp.nris.mt.gov/> (Montana Natural Heritage Program)
- <http://maps2.nris.mt.gov/mapper/> (Montana Natural Resource Information System Digital Atlas of Montana)
- <http://www.census.gov/> (US Census Bureau)
- <http://fwp.mt.gov/default.html> (MT FWP)
- <http://www.mdt.mt.gov/> (MDT)
- http://www.fws.gov/montanafieldoffice/Endangered_Species/Listed_Species.html (USFWS Listed Species of Montana)
- <http://www.wildlifecrossings.info/beta2.htm> (Wildlife Crossings Toolkit)

Appendix A

Cooperating Agencies

#1

FOR OFFICIAL USE ONLY

BOARD of COMMISSIONERS

COUNTY OF CARBON • STATE OF MONTANA

Post Office Box 887
Red Lodge, MT 59068

Phone: (406) 446-1595
Fax: (406) 446-2640

Received

March 19, 2002

MAR 20 2002

Mr. Mike Wambolt, Project Engineer
Kadmas, Lee and Jackson
P.O. Box 80303
Billings, Montana 59108

Kadmas Lee & Jackson

Subject: Project STPP 28-2 (25) 70
Control No. 4375
US Highway 212 from Red Lodge to Roberts

Dear Mike,

We appreciate your early involvement of Carbon County in this project. We will be interested in approach design onto U. S. 212 from any Carbon County road including the streets of Roberts. We do not know of any other Carbon County property that will be affected, and do not anticipate any problems. We look forward to the completion of this project.

Carbon County is working with the Roberts Community Foundation on a side walk project utilizing CTEP funds. A part of the project involves drainage of water that would normally follow First Street and directing it toward U.S. 212. We are working with MDOT on this issue. The engineer working for Carbon County on this project is Bruce McKee, of McKee Engineering of Red Lodge, Montana. Carbon County will need to place larger culverts at our approaches to U.S. 212 to make this work.

Carbon County would also like to request Cooperating Agency status for this project in accordance with U.S. Department of Transportation, Federal Highway Administrations (FHWA) regulations (23 CFR 771.111 (d)).

Thank you for your attention.

John E. Prinkki
Carbon County Commissioner

cc: Bruce Barrett, Administrator - MDT Billings Dist.

#2

Kadrmas
Lee &
Jackson

Engineers Surveyors
Planners

MEMO

Date: June 28, 2007
To: Charlotte Brett
Copy To: File
From: Mike Wamboldt
Re: Red Lodge North; Project STPP 28-2(25)70, UPN 4375;
Dakota Avenue, Boyd

The purpose of this memo is to document a phone conversation between myself and Dave Davidson, Carbon County Commissioner on June 28, 2007.

I spoke with Dave regarding what the commissioners had decided they would like to see happen at Dakota Avenue in Boyd. Dave confirmed that the County had spoken with their constituents and decided:

1. They would prefer to keep the intersection open.
2. Their main concern is with the school bus traffic that circulates through Boyd and with being able to have fire access at that location.
3. The county said they would be OK with a right-in/right-out access, or at minimum a turnaround within that approach.

I told Dave that we had looked closer at a right-in/right-out access at this location and determined that it couldn't be accomplished well without constructing a raised median. The raised median would be unsafe due to the speed of traffic and the lack of curb and gutter at this location. We agreed to leave the approach as it exists today.

701 845 4980

1010 4th Avenue SW

PO Box 937

Valley City, ND 58072-0937

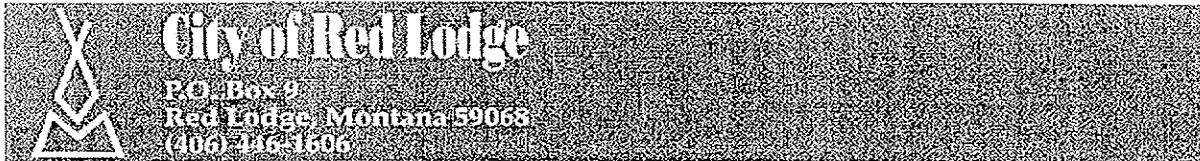
Fax 701 845 0252

www.kljeng.com

Kadrmas, Lee & Jackson, Inc.

A KLJ Solutions Company

#3



MAR 01 2005
February 28, 2005

Bruce Barrett, District 5 Administrator
Montana Department of Transportation
P.O. Box 20437
Billings, MT 59104-0437

MASTER FILE
COPY

Re: U.S. Highway 212 Corridor Study
STPP 28-2(25) 70

Dear Mr. Barrett:

Thank you for taking the time to visit with us this past week about the above-referenced project. We appreciate your candor and flexibility in dealing with the community's changing needs. As you saw from the meeting, the same development pressures that drove the City to request assistance from Montana Department of Transportation are still with us.

In 1999 the City of Red Lodge ("City") began experiencing development and expansion issues on the north end adjacent to U.S. Highway 212. The development requires increased services, and has the potential to create serious conflicts with future improvements along this main access route into the City from Billings.

Subsequently, The Red Lodge City/County Planning Office asked the MDT to provide a design for U.S. Highway 212 to accommodate these changing needs. The area of concern is on the north end of Red Lodge from approximately 5th Street to the Two-Mile Bridge road.

The City specifically asked that the design include future roadway elevations, curb and gutter, sidewalks, storm drain, right-of-way widths, and approach locations. It is the City's intent to use the completed design as a guide for growth policies, community development, and permitting requirements. The City may require a developer to construct some of the features as a permit requirement. With the assistance of MDT, the City expects to accommodate new development, while preserving the character and aesthetics all along the corridor.

On behalf of the City, I want to express our appreciation for MDT's assistance in this planning effort, and anticipate continued mutual cooperation on this project.

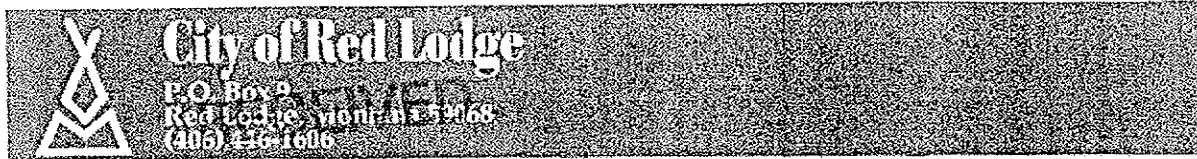
City of Red Lodge

By:


Richard C. Gessling, D.D.S.
Mayor, City of Red Lodge

cc. file

#4



MAY 09 2005

May 5, 2005
MONTANA DEPT. OF TRANSPORTATION
BILLINGS DISTRICT
BILLINGS, MONTANA
Bruce Barrett, District 5 Administrator
Montana Department of Transportation
P.O. Box 20437
Billings, MT 59104-0437



Re: Montana State Highway 78
STPP 78-1(8)0; Control #4890

Dear Mr. Barrett:

After seeing a notice of preliminary plans being available for the above-captioned project, I contacted your staff and received a Memorandum dated October 25, 2004 ("the Memo"). Please let me use this opportunity to express my appreciation for the many acts of cooperation you and your staff have shown me in the brief time I have been with the City of Red Lodge.

The Memo provides me with a background and status report on this project I appreciate having. Development within the project area is moving along very quickly and changes occurring just since the date of the Memo may want to be considered in updating the analysis for this project. The City is budgeting to do a comprehensive recreational trails plan this coming fiscal year, and the notation in the Memo for separated trails in the project area will be taken into consideration as we develop that trails plan.

As you know, I have asked MDT to consider a roundabout at the intersections of Highways 78 and 212. In looking back at the Capital Improvements Plan ("CIP") done by the City in 1997, I found that concerns over that intersection were being expressed even then, and traffic patterns, traffic loads and the need for better traffic flow patterns has only become more obvious with time. Since this intersection is the eastern-most point for the project, I reiterate my request for consideration of a roundabout at this intersection.

Although I alluded to the possibility of moving the intersection either north or south previously, events are transpiring that might influence your considerations for locating this intersection. Red Lodge School District #1 is considering a new high school east on 1st Street from Highway 212, and the owner of the trailer court west of that intersection would be interested in re-developing that property. Serious consideration needs to be given to re-locating the intersection of 78 and 212 to 1st Street rather than its present location on 3rd Street.

The highway passes through a draw in the bench, which contains both a pond and a house. This area gets very little sun in the winter, and often has ice flows develop on the highway. The house is now on the market, and MDT should seriously consider purchasing the property to allow better alignment of the highway, which will also remove a serious traffic hazard posed by the lack of parking for that house.

The former "gravel pit" property at the top of that draw is also for sale and development plans are in the offing for that property. Re-alignment of the road at the top of the draw may also help alleviate ice build-ups and allow for a grade reduction from the present 11%. The entrance for the gravel pit is presently at a point where three (3) roads all intersect, and all of them are on downhill grades at this intersection. Since this intersection is on a north-sloping hillside it too creates hazards for drivers in the winter so we would ask consideration be given to recommendations for how we might mitigate or even alleviate this problem. Development on the west bench will only make this intersection more of a problem in the years this project is suppose to cover.

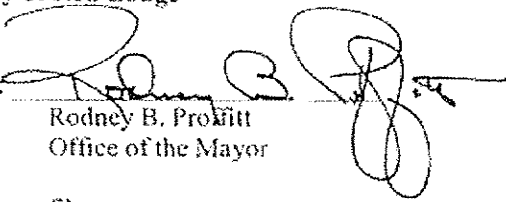
The 1997 CIP recommends construction of a road between the Ski Hill Road on the South and highway 78 on the North. Presumably, this road would follow along the west side of the airport and fairgrounds properties and then along the edge of the west bench before intersecting with the Ski Hill Road at Tipi Village. I note the 10/24/04 Memo envisions widening at least one curve (a good plan), but I am wondering if MDT could also provide professional assistance in how and where we might create a better flow of traffic by acting on the link recommended in 1997. This would not be a so-called "by-pass", but rather a connecting artery between two roads now under-going re-engineering studies to help disperse increasing traffic due to development occurring west and north of Red Lodge.

Another connection MDT might consider in dispersing traffic would be a connection between highways 212 and 78 north of the country club estates. Recently, the local hospital decided to re-locate its operations to a site at the north end of the golf course in country club estates on Highway 212, so bringing a road in from the west to this point would provide alternative emergency access.

Please accept this letter as comments by the City on the October 24, 2004 Memo. They are neither exhaustive, nor final comments, but rather part of an on-going attempt by the City to provide positive informational input for the process. We appreciate any consideration you might give this letter.

City of Red Lodge

By:


Rodney B. Proffitt
Office of the Mayor

cc. file

#5



City of Red Lodge

P.O. Box 9
Red Lodge, Montana 59068
(406) 446-1606

Received

JUN 15 2005

June 13, 2005

Kadrmass Lee & Jackson

Sheri G. Lares
Kadrmass, Lee & Jackson, Engineers
P.O. Box 80303
Billings, MT 59108-0303

Re: MDOT Project – Red Lodge North Design Study
Request for Cooperating Agency Status

Dear Ms. Lares

Please accept this letter in confirmation of our phone conversation of late last month. The City has received your letter of May 19, 2005 and would appreciate being designated as a cooperating agency for the project STPP 28-2 (25) 70. Please send all background information available on this project to date so that we might be better acquainted with the project, its status, and the scoping done on this project to date.

We are advised this project will entail reconstruction of the right-of-way in two or more phases. The work will be phased from the City of Red Lodge to the unincorporated area known as Roberts. The first phase would extend from the City to mile post 71.54, and will include everything north of the intersection of 8th Street and Broadway Avenue within the City of Red Lodge. A letter outlining some of the City's concerns and willingness to participate in planning for this project was sent to Bruce Barrett on or about December 8, 2004 with subsequent follow-up communication. Some of the comments made previously follow.

The public meeting conducted in Red Lodge made clear the project's southern starting point was an important factor for the City. Every intersection within the project area has issues that need to be dealt with in this project. At least those areas south from the intersection of highways 78 and 212 are expected to be re-engineered as urban corridor. The area north from there to the Two Mile Bridge is no longer rural, but an emerging growth area for the City.

- The City has an historic lighting project in progress. This lighting project will include the area south from Eighth Street. The City would ask that the project include compatible lighting, sidewalks, and curb & gutter to the highway's intersection with State Highway 78 and all other lighting contemplated also be as compatible as possible to the character of the City.

- The City just held a public forum on streets and sidewalks, and several people mentioned the drainage problems. Including the area north from Eighth Street in this project would alleviate some of the drainage problems the public has brought to our attention, and could be the basis we need to work from in developing a drainage plan for the City.
- The local hospital has a purchase agreement for land to build a new hospital, and associated care facilities just north of the REA building. The hospital wants city services to this site. The site under contract lies between the golf course and the northerly City limits on the west side of U.S. Highway 212; all within the City's jurisdiction.
- The hospital anticipates not just heavy traffic in and out of its facility, but also emergency traffic from both the north and south. The City is reviewing its options in extending at least one street south to alleviate some traffic congestion, but we are not all sure we will be able to acquire all the right-of-way to accomplish this. The City recommends MDT design the highway to be compatible with needs of this hospital project and the development this project is likely to spawn.
- The right-of-way will necessarily require consideration of three lanes, turn lanes, acceleration lanes, drainage, utility corridors, and limited access points to assure good and extended vision. The hospital projects it will need city services by late 2006 so the City would appreciate highway improvements by that date also. At the very minimum if the right-of-way issues could be resolved to allow utility easements, it would be helpful. It would also be helpful to us to know what MDT's timeline for reconstructing phase 1 is so we can keep the hospital informed.
- The City understands certain property owners along the highway have taken possession of the former railroad right-of-way, which we believe to be public land suitable for a separated recreational trail. Red Lodge is very much interested MDOT assert whatever ownership rights may exist, and incorporate a trails component to the design of this roadway.
- Emergency vehicles are entering the intersection of highways 78 and 212 under all conditions. At the same time, we have tourists stopping for the chamber and people trying to access businesses and the downtown. We have also been contacted by a developer inquiring about putting in multi-use, high density development where the trailer court is (just north and west of the intersection) and we would want to plan for that eventuality as well. A traffic study is needed to determine just what is needed.
- The City has initiated discussions with the Carbon County Arts and with the owner of what is commonly referred to as the "Pony Express" building about those properties lying between Lions Club park (west) and the highway between 6th and 8th streets. The City is interested in providing public restrooms for the park, expanding parking for the businesses located in this area, providing better sidewalk access in this area, and supporting our arts and crafts community.

- The City is very concerned about the traffic patterns at the interchange of highways 78 and 212. This intersection needs a complete overhaul. Please consider putting in a "round-about", recommending closure of certain city streets at that same location, and other possible alternatives to the present situation. We have been talking to the owner of the trailer park on the north, and the City owns land south of the intersection, so adjustments could be made either north or south to create a safer, more efficient, intersection.

Thank you in advance for your kind consideration of the City's concerns. We appreciate Gary Neville's efforts to arrange a meeting to discuss these points with more specificity. Please feel free to contact me with any questions or comments on this letter at your convenience.

City of Red Lodge

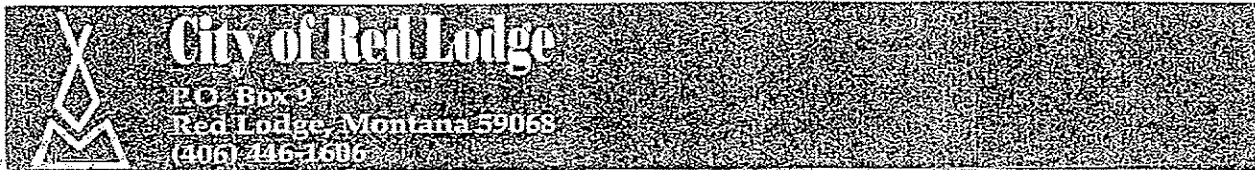
By: 
Rodney B. Proffitt
Office of the Mayor
City of Red Lodge

e-mail: RLadmin@vcn.net

cc. Richard C. Gessling, Mayor

file

#6



SEP 19 2005

SEP 16 2005
 MONTANA DEPARTMENT OF TRANSPORTATION
 BILLINGS DISTRICT
 BILLINGS, MONTANA

Bruce Barrett, District 5 Administrator
 Montana Department of Transportation
 P.O. Box 20437
 Billings, MT 59104-0437

Re: Montana State Highway 78
Response to Notice of 9/14/05

Dear Mr. Barrett:

Notice of a public meeting to discuss the above-captioned project appeared in the *Billings Gazette*, and this letter is written in response to that notice. The City of Red Lodge has already requested cooperating agency status with regard to re-engineering plans for U.S. Highway 212 north of Red Lodge, and has sought to participate in planning for reconstruction of the Beartooth All-American Road and the Ski Run Road.

With so many different projects being implemented within such a short time span, the City very much wants to make sure planning going into these projects is coordinated, and adapts these access corridors to the needs of the City for the 21st century rather than simply re-working transportation corridors for needs long abandoned from the 19th Century. Needs have changed a great deal for this community since the days of the railroad and coal mining.

The City recently witnessed the dire economic consequences resulting from the loss of access to this community from a natural disaster. Now, planning is underway for closure of key transportation access points from these projects. The City is concerned about negative impacts these projects will have on the local economy; and therefore, request that substantive efforts be undertaken to minimize the impediments to traffic, and expedite construction during the key summer tourist season. Any detours, closures, etc. necessary to construction need to be coordinated with local authorities to assure that economic impacts are mitigated to the fullest extent possible.

The State Highway 78 corridor is seeing a great deal of development. Although the corridor is becoming increasingly urbanized, the County continues to conduct land use planning as it did fifty years ago. One of the few influences on how development will occur in outlying areas to the City is transportation, and we are hopeful, this project will consider the urbanization of this transportation corridor. The City would request consideration of a north-south roadway at just west of the Red Lodge Country Club extending past the fairgrounds to the Ski Run Road; and in the alternative for a re-routing of 78 to downtown Red Lodge (business route). The City would also ask for consideration of a re-routing 78 along the north side of the Red Lodge Country Club to U.S. Highway 212.

Copy to [unclear]
 [unclear]
 [unclear]

MASTER COPY	Consultant Design		Amount
	Design	Amount	
	Routing		
	Regulatory Chief		
	Consultant planning		
	Design Supervisor		
	CTEP Engineer		
	TIM KELLY (RLT)		
	JOHN SHREFF (HKN)		

Just west of the aforementioned intersection, Highway 78 begins a steep incline to reach the top of the bench. The grade through this climb makes it treacherous driving, but other hazards also exist along this stretch of highway. The City alerted MDT months ago that the house just south of the highway on the grade was for sale along with 4 acres. No action was taken and the land was sold. It is unfortunate because the location of this house creates ice flows onto the highway, and there is a pond on the property that poses significant issues for the highway as well.

The City has three (3) intersections along the aforementioned incline. One intersecting street is not on the City plat and the City would like for MDT to advise the City on whether this intersection should remain open. This is Word Avenue. It is a blind intersection, very narrow, and not necessary to the City's transportation planning.

The second existing intersection is at Airport Road and 78. Airport Road enters on the down-hill from the south, which makes it hard to keep dry in winter. This intersection may soon have an off-set intersecting access from development planned for what is commonly known as "the gravel pit". This would mean that three roads are all intersecting at the same location and all are downhill, narrow, roadways.

The final intersection is at Lazy M Street and 78 almost at the top of the aforementioned grade up to the west bench. This last intersection is a major collector street for the Red Lodge Country Club subdivision and gets a lot of traffic, which will continue to increase in coming years. The intersection is also at the end of a long downhill curve for traffic coming from the west. The City believes this is potentially a dangerous intersection. Visibility for traffic entering onto 78 from Lazy M to go east is particularly difficult in the mornings. The City would request recommendations from MDT how we might partner with MDT to relocate or at least mitigate these issues as to all three of these existing intersections, and how best to locate the roadway yet in the planning stage.

The Beartooth Hospital has recently purchased land at the north edge of the City. In its present location, emergency vehicles could bypass the downtown by using the Airport Road to reach the hospital, but once relocated, the emergency vehicles will have a more convoluted route. The City is most concerned about the most likely new route to the hospital, because ambulances will soon be passing the Fire Station at the corner of highways 78 and 212, which could exacerbate a high-risk intersection. The City has already asked that a roundabout be considered at that intersection in the 212 planning, and we hope that plans for this project will cooperate in evaluating opportunities to better control and disburse traffic at that intersection.

Finally, the City has budgeted to do a comprehensive trails plan for the City this year. In a previous memorandum, mention was made of the City's desire to have a separated trail along 78 so I understand MDT is aware of the City's intentions. Any input into our process of developing a trails system MDT has to coordinate our efforts to mutual benefit would be appreciate. Once the trails plan is completed the City would have the expectation that MDT would follow it as much as possible during this project and accommodate the plan into the design of the re-engineered highway.

Please accept this letter as preliminary comments providing direction to scooping for the projects enumerated earlier in this letter. They are neither exhaustive, nor final, but rather part of an on-going attempt by the City to provide positive informational input for the process. If cooperating agency status is available that would allow the City to become a full participant in this project planning, we would appreciate being considered for that status.

The City appreciates any consideration the Montana Department of Transportation gives this letter. We look forward to working with you on planning, design and construction of this project and the others in and around Red Lodge over the next few years.

City of Red Lodge

By: 

Rodney B. Proffitt
Office of the Mayor

cc. Richard C. Gessling, Mayor
Jim Lynch, Director MDT
Tom Kaiserski, Office of the Governor
file

7

RESOLUTION NO. 3223

A RESOLUTION OF THE CITY COUNCIL IDENTIFYING AND SELECTING CERTAIN PREFERRED ALTERNATIVES PROPOSED BY THE MONTANA DEPARTMENT OF TRANSPORTATION FOR MDT PROJECT # STPP 28-2 (2570), KNOWN AS THE CORRIDOR STUDY RED LODGE NORTH.

WHEREAS, the Montana Department of Transportation (MDT) has proposed rebuilding highway 212 that runs through the City of Red Lodge and has requested the City Council's input and selection of certain preferred alternatives for specific areas and intersections within and/or near the City; and

WHEREAS, The City Council appreciates the opportunity to cooperate with MDT to identify preferred alternatives for the 212 Corridor Project prior to when the designs are prepared and finalized.

WHEREAS, based on the alternatives provided by MDT, the City Council hereby selects and supports the following preferred alternatives:

1. The one-way design alternative, as generally described by the attached concept, for Oakes Avenue between 8th and 7th Streets, with that one way being southbound, to improve the safety and enjoyment of pedestrian traffic as well as to increase opportunities for parking and a flexible street scene for civic and cultural events, with parking being angled.
2. Construction of a roundabout at the intersection of Highways 78 and 212, to realize the safety advantages that roundabouts provide, capture the cost advantages of roundabouts over time, and provide a distinctive entrance into the City of Red Lodge.
3. Further exploration of alternative options to a continuous two-way left turn lane from the intersection of Highways 78 and 212 to the Two-Mile Bridge Road and continuing North, while considering the current transportation design and the future impact the proposed design may have on current planned and unplanned land use patterns for the North Corridor of Red Lodge.
4. Creation of a controlled access corridor, designed appropriately through consultation and future legislation by and between the City Council and Carbon County to identify, adopt and implement appropriate and sufficient land use regulations to support a controlled access roadway along the 212 Corridor, with the acknowledgement that MDT has no authority to create or enforce land use regulations in either the City or Carbon County. The concept for a controlled access corridor includes identifying appropriate spacing for vehicular access.

NOW THEREFORE, BE IT RESOLVED, that the City Council hereby supports the preferred alternatives listed herein and further requests that MDT consider the City's selection of preferred alternatives when designing the overall project.

PASSED and APPROVED by the Red Lodge City Council this 10th day of ~~September~~ October 2006.

FOR THE CITY OF RED LODGE, MT

By: 
Brian C. Roat, Mayor

Attest: 
Debbie Tomicich, City Clerk

8

RESOLUTION NO. 3228

A RESOLUTION OF THE CITY COUNCIL IDENTIFYING AND SELECTING CERTAIN PREFERRED ALTERNATIVES PROPOSED BY THE MONTANA DEPARTMENT OF TRANSPORTATION FOR MDT PROJECT # STPP 28-2 (2570), KNOWN AS THE CORRIDOR STUDY RED LODGE NORTH.

WHEREAS, the Montana Department of Transportation (MDT) has proposed rebuilding highway 212 that runs through the City of Red Lodge and has requested the City Council's input and selection of certain preferred alternatives for specific areas and intersections within and/or near the City; and

WHEREAS, The City Council appreciates the opportunity to cooperate with MDT to identify preferred alternatives for the 212 Corridor Project prior to when the designs are prepared and finalized.

WHEREAS, based on the alternatives provided by MDT, the City Council hereby selects and supports the following preferred alternatives:

1. Construction of an urban cross-section consistent with a City approved streetscape plan and MDT Urban Design Standards from 8th Street to the intersection of Highways 78 and 212.
2. Construction of roundabouts at all full access intersections, including that of Highways 78 and 212, to realize the safety advantages that roundabouts provide, capture the cost advantages of roundabouts over time, and provide a distinctive entrance into the City of Red Lodge.
3. Construction of a continuous two-way left turn lane from the intersection of Highways 78 and 212 extending approximately ½ Mile North, in consideration of current access issues along this portion of the corridor.
4. Construction of a controlled access corridor as proposed along the 212 North Corridor, including a raised median with appropriate lighting. Implementation of a controlled access corridor may require the city and or county to implement land use planning and regulation legislation supporting the access control corridor. MDT shall have no authority to adopt or implement any land use regulations.

NOW THEREFORE, BE IT RESOLVED, that the City Council hereby supports the preferred alternatives listed herein and further requests that MDT consider the City's selection of preferred alternatives when designing the overall project.

PASSED and APPROVED by the Red Lodge City Council this 27th day of March 2007.

FOR THE CITY OF RED LODGE, MT

By: _____

Brian C. Roat, Mayor

Attest: _____

Debbie Tomicich, City Clerk

Appendix B

NRCS Coordination and CPA-106 Form

United States Department of Agriculture



Natural Resources Conservation Service
606 West Front Street
PO Box 510
Joliet, MT 59041-0229

Received

DEC -2 2002

Kadrmass Lee & Jackson

File 2201102

~~BS 102~~

CI

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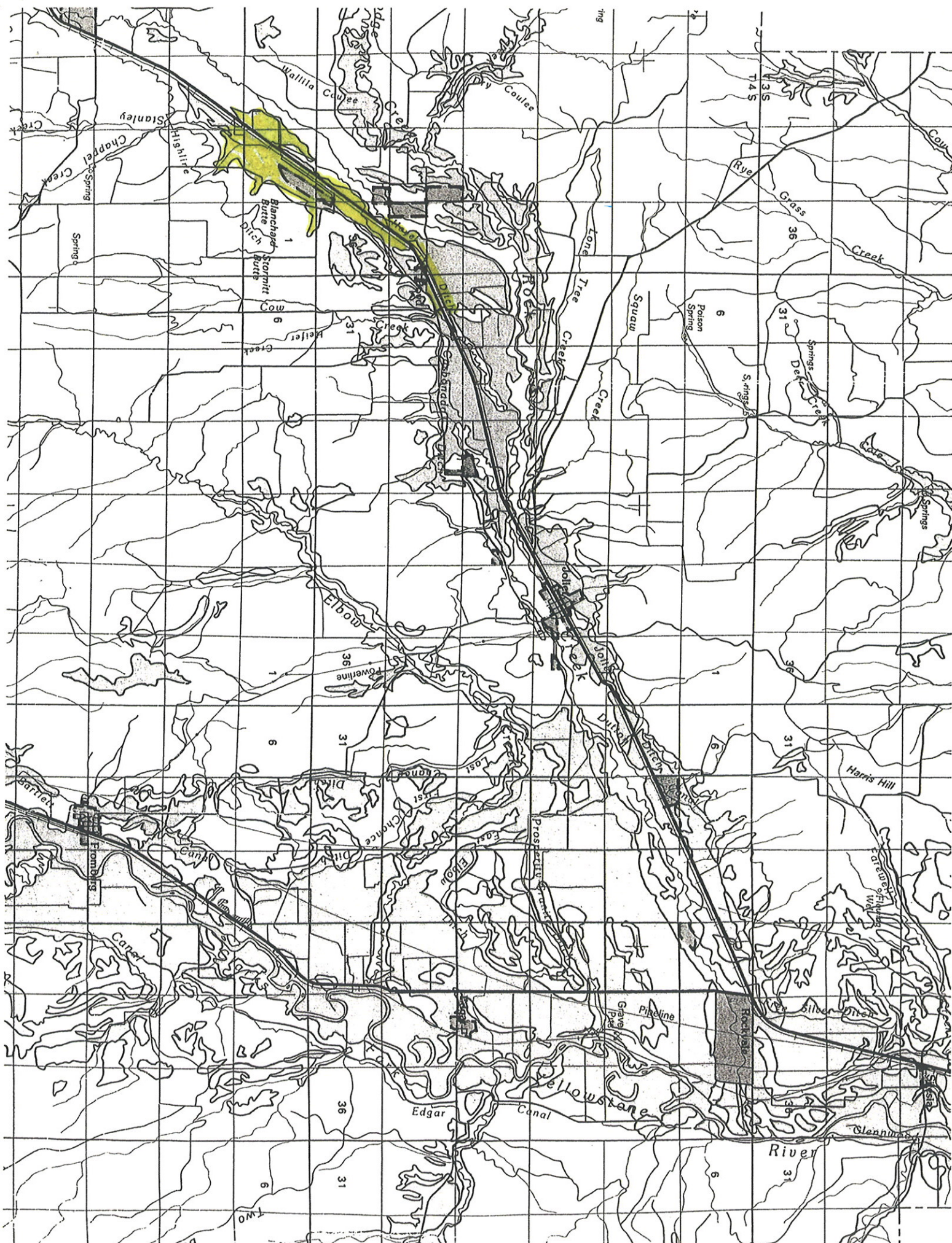
November 29, 2002

Dear Mr. Vanbolt,

Enclosed is a map with the prime farmland highlighted in yellow for the highway from Boyd to Red Lodge. The only portion with prime farmland is on the end near Boyd. Assuming that all your work would take place within the existing right-of-way, prime farmland would not be a factor.

If additional land beyond that would be included then the prime farmland issue would be relevant. Please advise me if you need any additional data.

Sincerely,
A. Ray McPhail
District Conservationist



**FARMLAND CONVERSION IMPACT RATING
FOR CORRIDOR TYPE PROJECTS**

08-01-07 07:38 NRCS-CPA-106
(Rev. 1-91)

PART I (To be completed by Federal Agency)		3. Date of Land Evaluation Request 7/11/07	4. Sheet 1 of 1
1. Name of Project US Highway 212 STPP 28-2 (25) 70		5. Federal Agency Involved FHWA	
2. Type of Project Reconstruction		6. County and State Carbon County, Montana	
PART II (To be completed by NRCS)		1. Date Request Received by NRCS	2. Person Completing Form Tony Rolfe
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		4. Acres Irrigated Average Farm Size 455,679 1072	
5. Major Crop(s) Hay, Barley, wheat, corn	6. Farmable Land in Government Jurisdiction Acres: 828,874 % 77	7. Amount of Farmland As Defined in FPPA Acres: 220,943 % 20	
8. Name of Land Evaluation System Used LESA	9. Name of Local Site Assessment System NA	10. Date Land Evaluation Returned by NRCS 8/13/07	

PART III (To be completed by Federal Agency)		Alternative Corridor For Segment			
		Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly		266			
B. Total Acres To Be Converted Indirectly, Or To Receive Services					
C. Total Acres In Corridor		266	0	0	0
PART IV (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland		86.9			
B. Total Acres Statewide And Local Important Farmland		48.7			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted		10006			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value		5%			
PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)					
		61			
PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))		Maximum Points			
1. Area in Nonurban Use	15	15			
2. Perimeter in Nonurban Use	10	9			
3. Percent Of Corridor Being Farmed	20	18			
4. Protection Provided By State And Local Government	20	0			
5. Size of Present Farm Unit Compared To Average	10	10			
6. Creation Of Nonfarmable Farmland	25	0			
7. Availability Of Farm Support Services	5	5			
8. On-Farm Investments	20	15			
9. Effects Of Conversion On Farm Support Services	25	0			
10. Compatibility With Existing Agricultural Use	10	0			
TOTAL CORRIDOR ASSESSMENT POINTS		160	72	0	0
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		100	61		
Total Corridor Assessment (From Part VI above or a local site assessment)		160	72	0	0
TOTAL POINTS (Total of above 2 lines)		260	133	0	0

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>
5. Reason For Selection:			

Signature of Person Completing this Part:

DATE

NOTE: Complete a form for each segment with more than one Alternate Corridor

Appendix C

March 2002 Agency Scoping

**List of Commenting Agencies
Corridor Study – Red Lodge North
Environmental Assessment
Carbon County, Montana**

Federal Agencies

Letter #

US Department of Defense – Army Corps of Engineers, Omaha District.....	1
US Department of Defense – Army Corps of Engineers, Helena Regulatory Office.....	2
US Department of the Interior – Bureau of Indian Affairs.....	3
US Department of Interior – Fish and Wildlife Service, Montana Field Office.....	4 and 5

State Agencies

Montana Department of Environmental Quality	6
Montana Department of Natural Resources and Conservation.....	7 and 8
Montana Fish, Wildlife and Parks	9

Local Agencies

BNSF Railway Company	10
Montana Land Reliance.....	11
Red Lodge Fire Department	12
Red Lodge Parks Board.....	13
Roberts Public Schools	14
Roberts School District #5	15
Roberts School District #5 Response from MDT	16



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
106 SOUTH 15TH STREET
OMAHA, NEBRASKA 68102-1618

REPLY TO
ATTENTION OF:

April 16, 2002

1
Received

APR 22 2002

Kadmas Lee & Jackson

Planning, Programs and Project Management Division

Mr. Mike Wamboldt
Kadmas, Lee & Jackson
2611 Gabel Road
PO Box 80303
Billings, Montana 59108

Dear Mr. Wamboldt:

We have reviewed your letter dated March 13, 2002 regarding the proposed construction on US Highway 212 from Red Lodge to Roberts, Montana, reference Project STPP 28-2 (25) 70, Control No. 4375, and we offer the following comments.

It should be ensured that the proposed project is in compliance with flood plain management criteria of Carbon County and the State of Montana. As a minimum, the design should ensure that the 100-year flood water surface elevation of any stream affected, that has a designated floodway, is not increased relative to pre-project conditions. If a designated floodway has not been identified then the design should ensure that the 100-year flood water surface elevation is not increased by more than one-foot relative to pre-project conditions. It is desirable, however, that water surface elevations either remain the same or decrease as a result of this project.

Your plans should be coordinated with the U.S. Environmental Protection Agency, which is currently involved in a program to protect groundwater resources.

If you have not already done so, we recommend that you consult with the U.S. Fish and Wildlife Service and the Montana Department of Fish, Wildlife and Parks regarding fish and wildlife resources. In addition, the Montana Historic Preservation Office should be contacted for information and recommendations on potential cultural resources in the project area.

If construction activities involve any work in waters of the United States, a Section 404 permit may be required. For a detailed review of permit requirements, final project plans should be sent to:

Mr. Allen Steinle
U.S. Army Corps of Engineers
Helena Regulatory Office
301 South Park Drawer 10014
Helena, Montana 59626-0014

If you have any questions, please contact Lauren Deane of our staff at (402) 221-4598.
Thank you for the opportunity to review this proposal.

Sincerely,

A handwritten signature in cursive script that reads "Candace Gorton".

Candace Gorton
Chief, Environmental, Economics and Cultural
Resources Section
Planning Branch



U.S. ARMY CORPS OF ENGINEERS

HELENA REGULATORY OFFICE
10 WEST 15TH STREET, SUITE 2200
HELENA, MONTANA 59626

REPLY TO
ATTENTION OF:

November 27, 2002

Helena Regulatory Office
(406) 441-1375 Phone
(406) 441-1380 Fax

Subject: Corps File Number 2002-90-186
Red Lodge - Roberts
STPP 28-2(25)70, MDT Control Number 4375

Mr. Mike Wamboldt, P.E.
Project Engineer
Kadrmass Lee & Jackson
PO Box 80303
Billings, Montana 59108

Dear Mr. Wamboldt:

Reference is made to your request for preliminary comments on the subject project. The proposed highway reconstruction project is located on US Highway 212 between the communities of Red Lodge and Boyd in Carbon County, Montana.

Under the authority of Section 404 of the Clean Water Act, Department of the Army permits are required for the discharge of fill material below the ordinary high water mark of our nation's rivers, streams, lakes or wetlands. A review of the limited project information submitted to this office has shown there will likely be work in Waters of the United States; as a result, this project is subject to Department of Army regulatory authorities, and permits will be required from the US Army Corps of Engineers.

This office will provide specific comments upon receipt of more specific project information, including additional environmental documentation and project design plans and details.

If you have any questions, please call Todd Tillinger of this office at (406) 441-1375, and reference Corps File Number 2002-90-186.

Sincerely,

Allan Steinle
Montana Program Manager

Copy Furnished:

Jean Riley, Montana Department of Transportation - Helena

File 2201102
B5 102

C1

#2

Received

DEC - 2 2002

Kadrmass Lee & Jackson



IN REPLY REFER TO:

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS

Rocky Mountain Regional Office
316 North 26th St.
Billings, Montana 59101

#3

Received

MAR 22 2002

MAR 21 2002

Kadrmass Lee & Jackson

Mike Wamboldt, Project Engineer
Kadrmass, Lee, and Jackson
P.O. Box 80303
Billings, Montana 59108

Dear Mr. Wamboldt:

These comments relate to the US Highway 212 project. The existing right of way (ROW) and area adjacent to that ROW are far from the boundary of the nearest Indian reservation under the jurisdiction of this office. As such, we have very few comments that we can make about the project. However, the project is located within an area historically occupied by the Crow Tribe. The historic occupation could have left archaeological or culturally significant sites. If the reconstructed road remains near the present ROW, there is very little likelihood of finding/disturbing artifacts.

If dramatic changes to the alignment are proposed, the possibility of archaeological discoveries will increase. For most environmental assessments developed for Montana Department of Transportation projects, an archaeological or cultural inventory and report is prepared. We assume this will be the case for this project as well. If you were not planning to do such, we would encourage it.

Questions may be directed to me at 406/247-7911.

Sincerely;

Chief, Environmental Services



United States Department of the Interior

FISH AND WILDLIFE SERVICE

MONTANA FIELD OFFICE

100 N. PARK, SUITE 320

HELENA, MT 59601

PHONE (406) 449-5225, FAX (406) 449-5339

#4
Received

MAR 28 2002

Kadrmass Lee & Jackson

File: M.29 (I)

March 25, 2002

Mike Wamboldt,
Kadrmass Lee and Jackson
P.O. Box 80303
Billings, Montana 59108

Dear Mr. Wamboldt:

This is in response to your March 14, 2002 letter regarding a proposal for reconstructing U.S. Highway 212 from Red Lodge to Roberts in Carbon County, Montana (STPP 28-2(25)70; Control No.4375). The project is being proposed by the Montana Department of Transportation. Your letter requested comments from the U.S. Fish and Wildlife Service (Service) on the proposal.

The Service has reviewed the proposed action and determined that threatened bald eagles (*Haliaeetus leucocephalus*) and nonessential experimental gray wolves (*Canis lupus*) may occur in the project area. To meet section 7 requirements a biological assessment should be prepared regarding these species. Please keep the Service apprised as the details of this proposal develop.

Your letter also requested any comments we may have regarding any property the Service may own or have interest in adjacent to the project corridor. Based on the information we have in this office and the map you included with your request, there are no such lands administered by the Service in the immediate vicinity of the proposed project location.

The Service has responsibility, under a number of authorities, for conservation and management of fish and wildlife resources. Chief among the federal statutes with which our office deals are the Fish and Wildlife Coordination Act, Endangered Species Act of 1973, and the National Environmental Policy Act. The Coordination Act requires that fish and wildlife resources be given equal consideration in the planning, implementation, and operation of Federal and federally funded, permitted, or licensed water resource related projects.

In Montana, habitats frequently used by important fish and wildlife resources are wetlands, streams, and riparian (streamside) woodlands. Special attention is given to proposed developments that include modification of wetlands, stream alterations, or contamination of important habitats. The Service recommends ways to avoid, minimize, rectify, reduce, or compensate for damaging impacts

to important fish and wildlife resources and their habitats that may be attributed to land and water resource development proposals.

We have reviewed the plans for the proposed activities and offer the following comments concerning wetlands and stream channels:

- a. In connection with the stream crossings, we recommend that you work closely with the Corps of Engineers (COE) Regulatory Office (406) 441-1375 regarding any Section 404 permits that may be needed. With regard to such permits, depending on permit type and other factors the Service may be required to review permit applications and recommend fish and wildlife protection or mitigation measures to the COE as appear reasonable and prudent at that time.
- b. The Service recommends clear spanning the stream channel, if possible, to avoid placement of structures in the stream channel. Bridge abutments and piers, and their attendant riprap, that are located in or encroach upon the stream channel can constrict flows, increase erosion and affect bedload movement up and down stream of the structure, resulting in significant effect to the physical, chemical and biological dynamic of the stream and its associated aquatic resources. The Service recommends that if in-stream structures are proposed, the direct, indirect, and cumulative impacts of those structures be analyzed, along with future activities related to scour protection and bank stabilization that are required to maintain such structures.

Should you have any further questions, please contact Mr. Scott Jackson within our office at (406) 449-5225, extension 201. Thank you for the opportunity to offer comments.

Sincerely,



R. Mark Wilson
Field Supervisor

#5



United States Department of the Interior

RECEIVED
MAY 18 2005
ENVIRONMENTAL

FISH AND WILDLIFE SERVICE
ECOLOGICAL SERVICES
MONTANA FIELD OFFICE
100 N. PARK, SUITE 320
HELENA, MONTANA 59601
PHONE (406) 449-5233 FAX (406) 449-8339

MASTER FILE
COPY

M.44 MDT (I)

Paul Sturm
Montana Department of Transportation
Environmental Services
2701 Prospect Avenue
P.O. Box 201001
Helena, Montana 59620-1001

Dear Mr. Sturm:

Date	5/13/05	May 12, 2005
Routing		
Bureau Chief		
Consultant Party Rep		
Design Supervisor		
CEP/Project		
Helvik		
KIT INC.		
SENT Stalos		
File		

cc: Karl Helvik - Consultant
Bonnie Stog - Env.
Bruce Barrett - Billings
Paul Ferry - Highways Env.
Mark Goodman - Hydraulics
Art Jacobsen - Env.
Paul Sturm - Env.
File - Env.

This is in response to your letter dated April 14, 2005, in which you requested the U.S. Fish and Wildlife Service's (Service) concurrence with your determination that the Montana Department of Transportation's (Department) proposed improvements to U.S. Highway 212, primarily between the towns of Red Lodge and Boyd in Carbon County, Montana (STPP 28-2(25)70; Control No. 4375), would not be likely to adversely affect federally-listed threatened or endangered species. This proposed project would entail reconstruction of 21.3 miles of U.S. Highway 212 and would include both urban and rural sections. Your letter stated that the Department intends to phase this proposed project under two or more construction projects, depending on the availability of funding and that your determinations of effect and concurrence request pertain to the entire road corridor. However, as each construction phase is designed, the Department would submit plans for that section to the Service to see if any new information would necessitate reinitiation of consultation.

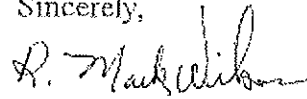
Your letter transmitted a biological assessment (BA) for this project that concluded that this project would not be likely to adversely affect threatened bald eagles (*Haliaeetus leucocephalus*) and would not be likely to jeopardize the continued existence of the Yellowstone non-essential experimental population of gray wolves (*Canis lupus*). Based on information provided in your letter and the BA for this project, the Service concurs with the Department's determination that this project, as proposed, would not adversely affect listed species. This concurrence is based upon the projects in this corridor being designed and constructed as described and upon implementation of the coordination measures stated in the BA that are intended to protect listed species. These measures should be implemented for each separate project that is constructed within this corridor. In addition, we acknowledge your determination that this project would not affect endangered black-footed ferrets (*Mustela nigripes*).

This concludes informal consultation pursuant to regulations 50 CFR § 402.13 implementing the Endangered Species Act (Act). This project should be re-analyzed if new information reveals

effects of the action that may affect threatened or endangered species or if the project is modified in a manner that causes an effect not considered in this consultation.

If you have questions about this letter or your responsibilities under the Act, please contact Scott Jackson at (406) 449-5225, extension 201.

Sincerely,

A handwritten signature in dark ink, appearing to read "R. Mark Wilson". The signature is fluid and cursive, with a prominent loop at the end.

R. Mark Wilson
Field Supervisor

Copy to: FWS-ES, Billings Suboffice



Montana Department of
ENVIRONMENTAL QUALITY

Received

MAR 28 2002

#6

Kadrmass Lee & Jackson

Judy H. Martz, Governor

P.O. Box 200901 • Helena, MT 59620-0901 • (406) 444-2544 • Website: www.deq.state.mt.us

March 22, 2002

Mike Wamboldt
Kadrmass, Lee & Jackson
P.O. Box 80303
Billings, MT 59108

Subject: Project STPP 28-2 (25) 70 - Red Lodge to Roberts

Dear Mr. Wamboldt:

I am responding to your request for information concerning contaminated sites on or near the above referenced project. Sources used to supply information for your data request include four Department of Environmental Quality (DEQ) - Remediation Division databases which contain information on the nature and location of Underground Storage Tank sites (USTs), Leaking Underground Storage Tank sites (LUSTs), Abandoned Mine sites, and State Superfund sites (CECRA). The State Superfund database also includes information on sites affected under the Water Quality Act (WQA) and pesticide-contaminated sites addressed under the Montana Agricultural Chemical Groundwater Protection Act. Site information from this database search revealed several UST and LUST sites in the reference area (SEE ATTACHED LISTS). The databases were searched using the following criteria: sites with identified addresses in Carbon county near cities of Red Lodge, Roberts, or Boyd.

More information can be found on the DEQ's website. The list of CECRA sites (State Superfund) can be found on the Web at <http://www.deq.state.mt.us/rem/hwc/Srs/cecrallistformats.asp>. The list of Federal National Priority List (Federal Superfund) sites can be found at <http://www.deq.state.mt.us/rem/mwc/feds.asp>. The list of active Underground Storage Tanks (USTs) and Leaking Underground Storage Tanks (LUSTs) can be found at <http://www.deq.state.mt.us/rem/tsb/iss/ustdownloads.asp>. For information concerning inactive mines, contact our office at 444-0475 or visit the Mine Waste Bureau's website at <http://www.deq.state.mt.us/rem/mwc/index.asp>. Information on hazardous waste generators or hazardous waste permitted facilities can be obtained from the DEQ's Air and Waste Management Bureau at 444-3490. For lists of permitted landfills and landfarms, contact DEQ's Community Services Bureau, at 444-4400. Finally, contact the DEQ's Complaint Management Section at 444-0379 for a list of the sites/spills about which DEQ has received complaints. The State does not have a comprehensive inventory program; therefore, a site could be contaminated and not be listed on any of the lists maintained by DEQ. For further information on your site area of interest, you are welcome to inspect and make copies of our files during normal business hours.

Please also be aware that new contaminated sites are discovered every day. You may encounter contamination at a location that we are not yet aware of. If you encounter soil or groundwater contamination at the subject property, please call our office at (406) 444-1420 to report contamination from USTs or the Complaint Management Section at 444-2964 to report all other contamination.

Feel free to call me at (406) 444-0474, if you have any questions or comments about this data request.

Sincerely,


Jack Yates
Information Services Section
Technical Services Bureau
Montana Dept. of Environmental Quality
444-0474
jyates@state.mt.us

EventID	SiteName	Location	City	Date	County
2297	ANDERSON CONOCO	910 W VILLARD	Red Lodge	07/22/1988	Carbon
211	BEARTOOTH ELECTRIC CO-OP INC	BOX 1119	Red Lodge	07/20/1993	Carbon
108	BOYD STORE	BOX 236	Boyd	06/11/1993	Carbon
979	CARBON COUNTY ABSTRACT TITLE C	105 N BROADWAY	Red Lodge	10/24/1989	Carbon
1324	CARBON COUNTY CATTLE CO	BOX 156	Boyd	10/07/1993	Carbon
751	CARTER'S BULK PLANT	HWY 212	Red Lodge	08/01/1991	Carbon
3314	County Shop	White Ave S R.L.	Red Lodge	06/17/1998	Carbon
313	COWGER, NICK	RTE 1 BOX 4165	Red Lodge	06/12/1991	Carbon
3007	Former AST Service Station	#1 Railroad Ave	Roberts	03/31/1997	Carbon
2567	LAUREL COOP ASSOC	BOX 11	Roberts	10/30/1991	Carbon
260	LONE PINE RANCH	CLEAR CREEK	Roberts	06/22/1993	Carbon
188	MT DEPT HWY-RED LODGE SITE	BOX 445	Red Lodge	09/10/1996	Carbon
1601	RANDELL UNION 76 BULK PLANT	Address Unknown	Red Lodge	08/20/1993	Carbon
3622	Ray Judd Ford	116 N Broadway	Red Lodge	07/07/1999	Carbon
428	RED LODGE EXXON	524 S. BROADWAY	Red Lodge	10/12/1994	Carbon
289	RED LODGE MTN SKI RESORT	W OF RED LODGE	Red Lodge	03/31/1989	Carbon
3346	Red Lodge Travel Center	403 S Broadway	Red Lodge	07/30/1998	Carbon
734	ROCK CREEK C STORE	1022 S ADAMS	Red Lodge	06/25/1996	Carbon
1744	ROCK CREEK C STORE	1022 S ADAMS	Red Lodge	03/09/1989	Carbon
312	T & D PUMP	HWY 212 N	Red Lodge	12/09/1993	Carbon
2999	Uncle Milt's Drive-In	704 S Broadway	Red Lodge	03/07/1997	Carbon
517	US HWY 212	BROADWAY & 17TH	Red Lodge	10/30/1995	Carbon
1155	Y-STOP	BOX 85	Roberts	05/27/1992	Carbon

AltFacilityID	Facility Name	Street Address	City	County
05-04228	T & D Pump	Hwy 212 N	Red Lodge	Carbon
05-05655	Ray Judd Ford	116 N Broadway	Red Lodge	Carbon
05-06599	Y-Stop C Store	Hwy 212 & Cooney Rd S	Roberts	Carbon
05-06961	Pony Express	401 N Broadway Ave	Red Lodge	Carbon
05-06970	Anderson's Conoco	224 S Broadway	Red Lodge	Carbon
05-09748	Rock Creek Convenience Store	1022 S Adams	Red Lodge	Carbon
05-09926	Beartooth Hospital & Health Center	600 W 21st Street	Red Lodge	Carbon
05-13924	Rock Creek North	902 N Broadway	Red Lodge	Carbon

DEPARTMENT OF NATURAL
RESOURCES AND CONSERVATION

orig - Sheri Lanes
cc: Kurtis S.
File
7



JUDY MARTZ
GOVERNOR

STATE OF MONTANA

DIRECTOR'S OFFICE (406) 444-2074
TELEFAX NUMBER (406) 444-2684

WATER RESOURCES DIVISION (406) 444-6601
TELEFAX NUMBERS (406) 444-0533 / (406) 444-5918
<http://www.dnrc.state.mt.us/wrd/home.htm>

48 NORTH LAST CHANCE GULCH
PO BOX 201601
HELENA, MONTANA 59620-1601

Mr. Mike Wamboldt
Kadrmass, Lee & Jackson
2611 Gabel Road
P.O. Box 80303
Billings, MT 59108

Received

December 12, 2002

DEC 16 2002

Kadrmass Lee & Jackson

RE: Comments on Preliminary Field Review Report – Project STPP 28-2 (25) 70,
U.S. Hwy 212 from Red Lodge to Roberts

Dear Mr. Wamboldt:

Based on my review of the information provided for this project, I offer the following comments:

There are no state-owned water projects or Water Resources Division property within the project area, so I would not anticipate any impacts; however, there are many private irrigation canals and ditches that cross under the existing highway. Culverts of adequate size would have to be placed for these canals and ditches. Also, it is important to place these culverts on grade (i.e. not raise them). A significant amount of wastewater collects in the existing borrow areas along the road. Adequate drainage would have to be planned for to deal with this water. There are also several springs and ponds about 1 mile north of Red Lodge that cause seepage under the highway.

I discussed this proposal with Mr. Keith Kerbel, the Water Resources Division Regional Manager in our Billings Office. He provided me with this information and is very familiar with the water related issues along this stretch of highway. Keith and I would like to be placed on the distribution list for the Environmental Assessment that will be completed for this project. Our mailing addresses are as follows:


Keith Kerbel, Regional Manager
Montana DNRC, Water Resources Division
Billings Regional Office
Airport Business Park
1371 Rimtop Drive
Billings, MT 59105-1978
(406) 247-4415
e-mail kkerbel@state.mt.us

#8

James P. Domino
Montana DNRC, State Water Projects Bureau
48 N. Last Chance Gulch
P.O. Box 201601
Helena, MT 59620-1601
(406) 444-6622
e-mail jdomino@state.mt.us

Thank you for the opportunity to review and comment on the Preliminary Field Review Report. Please contact me if you have any additional questions.

Sincerely,



James P. Domino
Environmental Specialist
State Water Projects Bureau

c: Keith Kerbel, Billings Regional Office
Kevin Smith

#9
April 9, 2002

Mike Wamboldt
2611 Gabel Road
P.O. Box 80303
Billings, MT 59108

Received

APR 10 2002

Kadrmass Lee & Jackson

Dear Mr. Wamboldt,

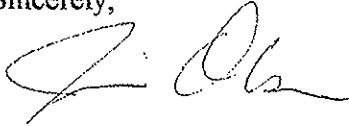
This letter is in response to the request for information about the fishery and aquatic habitat in the vicinity of US Highway 212 from Red Lodge to Roberts. The fisheries habitat within this section of stream supports a thriving population of wild brown, rainbow and brook trout. Habitat types include riffles, glides and pools that provide critical spawning and rearing habitat for fish. There is an active floodplain throughout much of this reach of stream and because of the intensity of spring floods and past stream manipulations the river channel is continually migrating. However, US Highway 212 is far enough from the stream throughout nearly the entire project (except at the bridge crossing near Roberts) that direct interaction between the reconstruction and the stream is unlikely. Indirect effects of road reconstruction on fisheries could include the transportation of disturbed soils during rain events from construction areas to the stream. Fine sediment such as sand and clay entering the stream can smother fish eggs incubating in stream gravels and cause other detrimental effects to aquatic organisms. Erosion control measures should be employed to regulate surface erosion of soils until natural vegetation can be reestablished.

Two stream crossings are associated with this reconstruction project: the crossing over Stanley Creek, a small tributary to Rock Creek between Boyd and Roberts and the bridge over Rock Creek near Roberts. I am currently unaware of the presence of a fishery in Stanley Creek, but if there is a viable fish population present, proper passage would need to be addressed so that fish from Rock Creek can access Stanley Creek and visa versa. If fish passage is an issue, a hydrologist would need to be consulted for proper culvert/bridge design. The current bridge over Rock Creek is a span bridge that does not restrict fish passage. However, angler access at public road crossings is an important concern and it is my desire that public access be improved at the bridge crossing Rock Creek. I am not aware if there is currently public access to Rock Creek from the rest area on the northeast side of the bridge, but if public access were available from the rest area, then access at the bridge would be less of a concern.

The fish population in Rock Creek includes predominantly rainbow, brook and brown trout, mountain whitefish, and mottled sculpin with a few Yellowstone cutthroat trout longnose dace and several species of suckers. Average length of trout within this section of river is roughly 10 in with fish ranging in size from 3 in to 18 in. Spawning and egg incubation times (i.e., times when fish are most susceptible to the effects of

siltation) for rainbow and cutthroat trout are approximately from April 1 to July 15 and for brown and brook trout from October 1 to April 1. If you have any question or comments, please feel free to contact me (406-322-1162).

Sincerely,

A handwritten signature in black ink, appearing to read 'Jim Olsen', with a stylized, cursive script.

Jim Olsen

Regional Fisheries Biologist, Columbus
Montana Fish Wildlife and Parks
P.O. Box 85
Columbus, MT 59019

#10

Received

MAR 26 2002

March 13, 2002

Kadrmass Lee & Jackson

John M. Cowles, Public Projects Manager
BNSF Railway Company
Suite 1A
2454 Occidental Avenue South
Seattle, WA 98134-1451

Subject: Project STPP 28-2 (25) 70
Control No. 4375
US Highway 212 from Red Lodge to Roberts

a KLJ Solutions company
Kadrmass
Lee &
Jackson
Engineers, Surveyors
and Planners

Dear Mr. Cowles:

Kadrmass, Lee, & Jackson has been selected by the Montana Department of Transportation to complete the project design through the right-of-way phase on the above referenced project. This includes the access management study and the environmental document development. We are requesting information from your office for the environmental documentation on this proposed highway project. Attached is a copy of the Preliminary Field Review Report describing the proposed project and a Project Location Map.

To ensure that all social, economic and environmental effects are considered in the development of this project, we are soliciting your views and comments on the proposed project pursuant to Section 102(2) (D) (IV) of the National Environmental Policy Act of 1969, as amended. We are particularly interested in any property that your department may own or have an interest in and which would be adjacent to the proposed highway improvement. We would also appreciate being made aware of any proposed developments your department may be contemplating in the areas under consideration for the proposed highway facility. It is our opinion that the project will not have a significant effect on the quality of the human environment. Any information or comments relating to environmental matters that you might furnish will be appreciated.

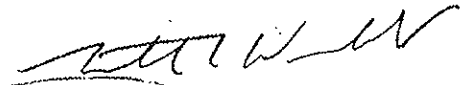
ENR
TOP500
Design FIRM

2611 Gabel Road (59102) • PO Box 80303 • Billings, MT 59108 • 406-245-5499 • Fax: 406-294-5502

Re: Project STPP 28-2 (25) 70
Control No. 4375
US Highway 212 from Red Lodge to Roberts

We would appreciate receiving a reply by April 10, 2002 so that this information can be considered early in the environmental analysis process. If you have any questions, please contact me at (406) 245-5499. Thank you in advance for your cooperation.

Sincerely,
Kadmas, Lee & Jackson


Mike Wamboldt, PE
Project Engineer

Attachments

Cc: Bruce H. Barrett, Administrator – MDT Billings District No. 5
Joseph P. Kolman, P.E. – MDT Bridge Engineer
Carl S. Peil, P.E. – MDT Preconstruction Engineer
Tom S. Martin, P.E. – MDT Consultant Design Engineer
John H. Horton, Chief – MDT Right-Of-Way Bureau
Timothy W. Reardon, Chief Counsel – MDT Legal Services
Stan Sternberg, Acting Environmental Manager – MDT Environmental Services
Bob Harrington, Area Manager – DNR&C Southern Land Office
Walt Scott, Supervisor – MDT Utilities Section
Federal Railroad Administration

Mike
In reviewing the design, it is my understanding that project has no impacts to the BNSF Ry. operating R/W. BNSF operates a railroad between Laurel, MT & Greybull WY. and does not intersect with ~~the~~ US Highway 212 between Red Lodge & Roberts. Therefore BNSF has nothing else to comment on.
M. Lamb.

The Montana LAND RELIANCE

#11

Received

Mr. Clay Schwartz
Kadrmass, Lee & Jackson
P.O. Box 80303
Billings, MT 59108

NOV 27 2001

26 November 2001

Kadrmass Lee & Jackson

Re: Montana Department of Transportation Project No. STTP 28-2(25)70, C.N.4375
Red Lodge North

Dear Mr. Schwartz,

I am writing on behalf of the Montana Land Reliance (MLR) regarding a proposed road expansion of Highway 212 from Red Lodge to Boyd, Montana. The MLR is a private, non-profit land trust dedicated to providing permanent protection for private lands that are significant for agricultural production, for fish and wildlife habitat, and for their scenic open space values.

The MLR holds conservation easements on three properties which border Highway 212 between Red Lodge and Boyd. They are the Conlon Property, the Hoiness Property, and the Lay Property. The former is near Red Lodge, Montana; the latter two are near Boyd, Montana. The conservation easements contain terms which limit potential expansion possibilities. At this time, I would like to know (1) the source of funding for this expansion project and (2) the approximate anticipated date this project is to begin.

In future, please be sure MLR receives any correspondence or ongoing notification of the progress of this project with respect to the three properties identified above. Feel free to call me at our Helena office if you have any questions.

Sincerely,



Noorjahan Parwana
Land Steward

GLACIER FLATHEAD OFFICE

470 Electric Ave. • PO Box 460
Bigfork, Montana 59911-0460
406/837-2178 • Fax 406/837-4980
email mlrnw@digisys.net

MAIN OFFICE

324 Fuller Ave. • PO Box 355
Helena, Montana 59624-0355
406/443-7027 • Fax 406/443-7061
email mtland@mt.net

EASTERN OFFICE

2320 Third Ave. N. • PO Box 171
Billings, Montana 59103-0171
406/259-1328 • Fax 406/259-1437
email mlr@mcn.net



Red Lodge Fire Department

P.O. Box 9 • Red Lodge, Montana 59068

(406) 446-2320 Fax (406) 446-3936

#12

Received

MAR 26 2002

Kadmas Lee & Jackson

03-22-02

To: Mike Wambolt PE
Project Engineer
Kadmas, Lee, and Jackson
2611 Gabel Road
Billings MT. 59102

From: Jerry Ballard
Fire Chief
Red Lodge Fire Dept.

Subject: Project STPP 28-2 (25) 70
Control Number 4375
US Highway 212 from Red Lodge to Roberts.

Dear Mike Wambolt

I am not the Police Chief for Red Lodge I am the Fire Chief. If information about your project needs to go to the Red Lodge Police Chief that information can be addressed to Richard Pringle P.O. Box 9 Red Lodge MT. 59068

The concern I have for this project is that it includes a turn lane onto Highway 78 from 212 at the junction at 3rd street in Red Lodge.

Thank you

Respectfully

Jerry Ballard



RED LODGE PARKS BOARD
CITY OF RED LODGE, MONTANA
PO BOX 9, RED LODGE MT 59068

#13

March 27, 2002

Montana Department of Transportation
Planning Division
Helena, Montana 59620

Dear Planning Division:

The Red Lodge Parks Board has begun the effort to secure funds to construct a city-wide pedestrian and bicycle trail system. Two components have been partially constructed (not paved) and another is under consideration by the MT Fish, Wildlife and Parks Recreational Trails Program.

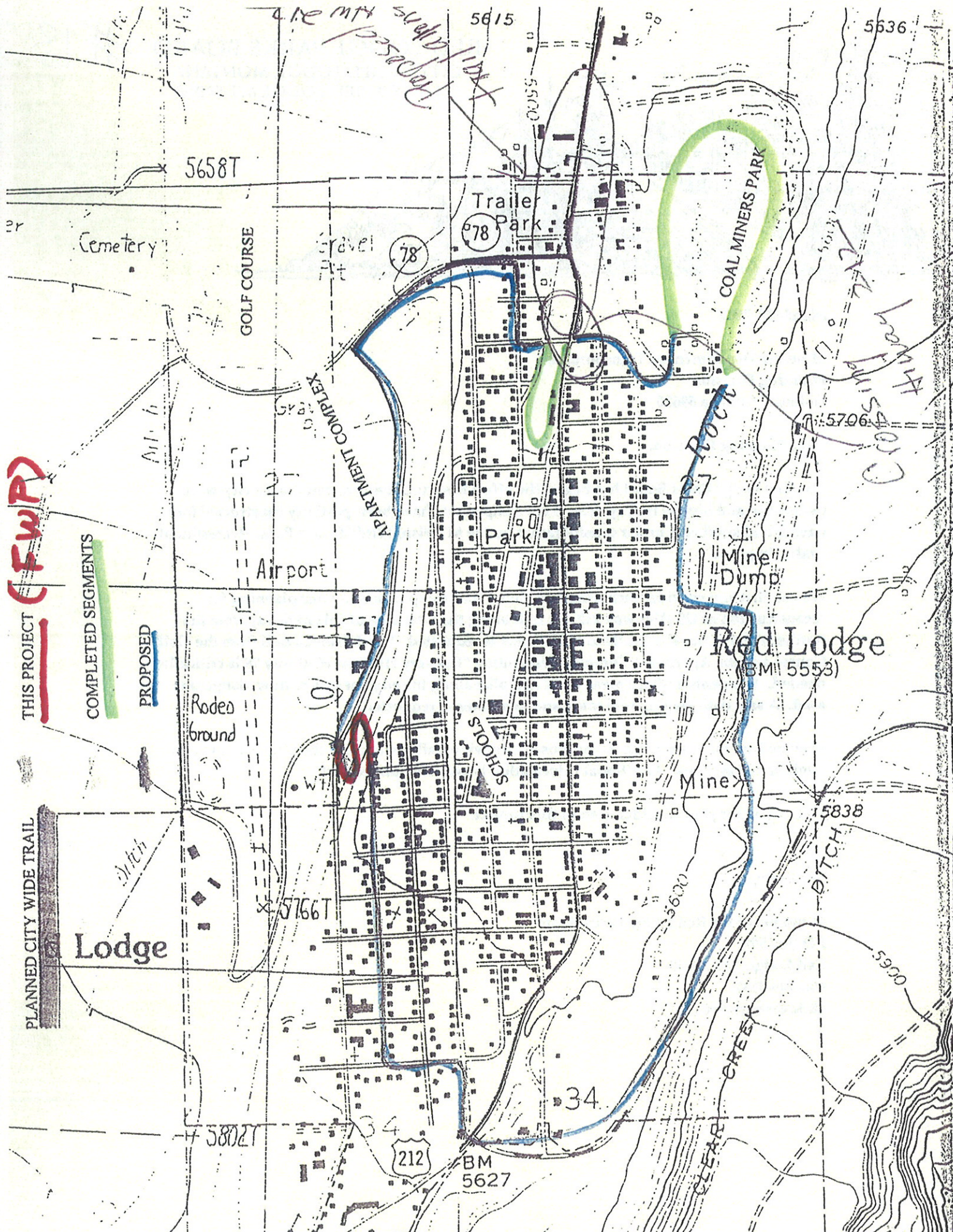
We ask that you consider including additional trail components in your planning for reconstruction of US Highway 212. A trail along the west side of this highway from the northern end of our city limits to Fifth Street is requested. In addition, a trail from the Golf Course and the Apartment Complex descending "Brewery Hill" on Highway 78 is critically needed. Residents of these areas walk and bike along the edge of this narrow, dangerous road. A safe path leading into town and to schools is requested.

Attached are maps showing the proposed city-wide trail system and the Highway 212 and Highway 78 sections. Additional information is available on request.

Thank you for your consideration of this project.

Sincerely,

Members of the Red Lodge Parks Board
PO Box 598
Red Lodge, MT 59068
406-446-3847
etafoya@vcn.com

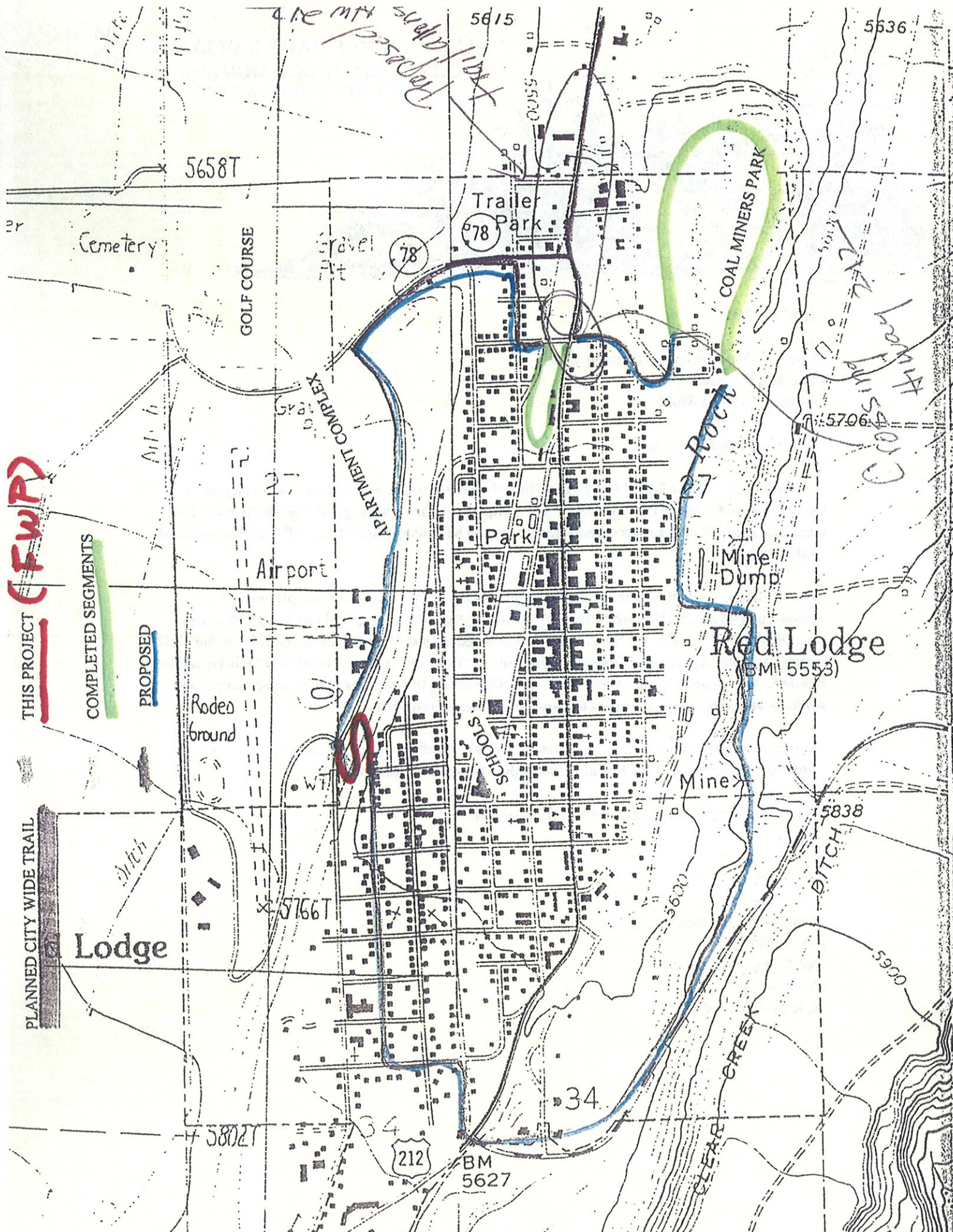
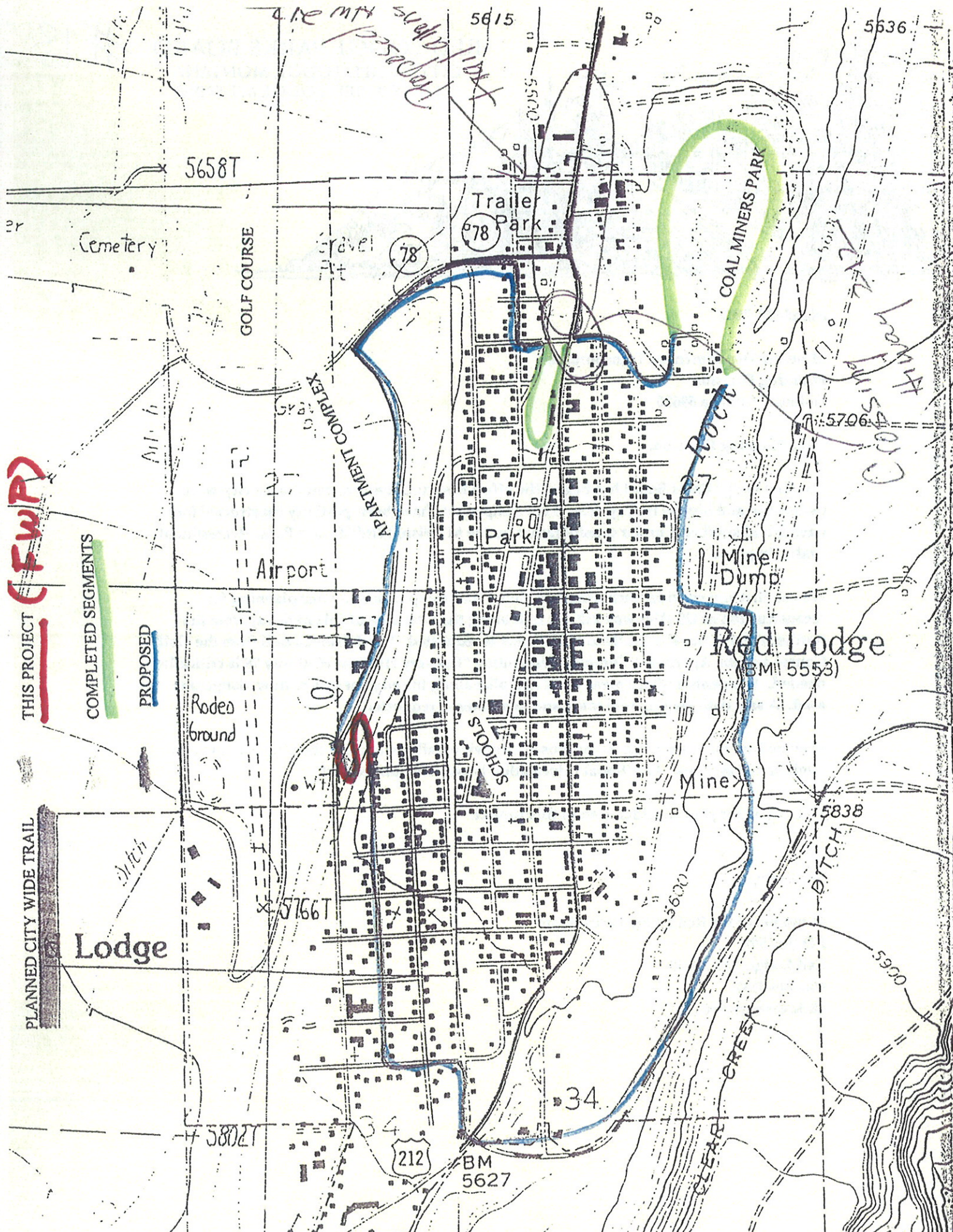


THIS PROJECT (FWP)

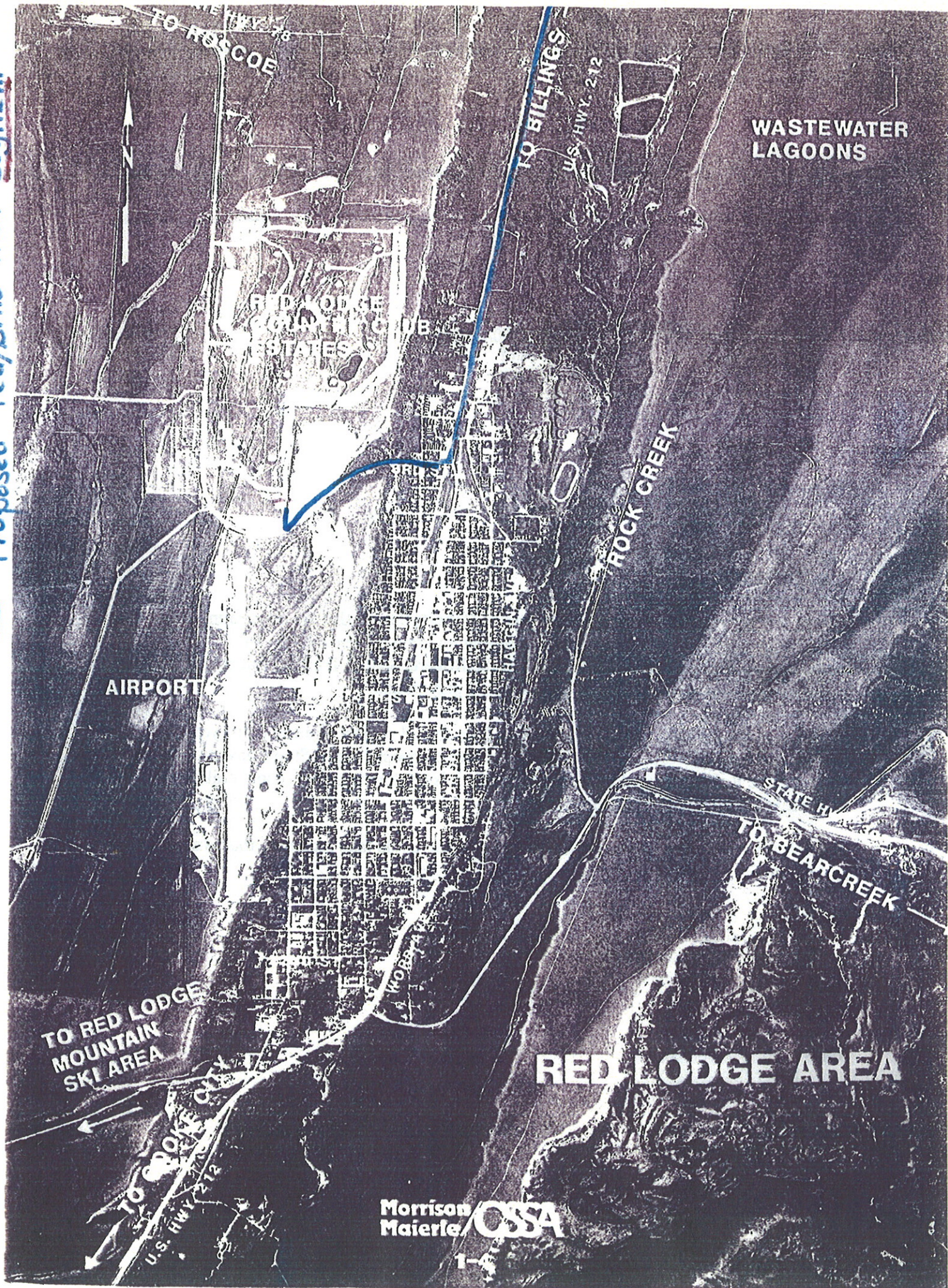
COMPLETED SEGMENTS

PROPOSED

PLANNED CITY WIDE TRAIL



— Proposed Ped/Bike Trail Segment



Superintendent
Randy C. Durr

MAS 9 FILE

District Clerk
Donna Tandy

#14

Roberts Public Schools

Athletic Director
George Nelson

P.O. Box 78 * 106 Maple * Roberts, MT 59070

(406) 445-2421
FAX: (406) 445-2506

RECEIVED

SEP 20 2002

MONTANA DEPT. OF TRANSPORTATION
BILLINGS DISTRICT
BILLINGS, MONTANA

September 20, 2002

Mr. Bruce Barette
424 Morey, Box 20437
Billings, MT 59104-0437

Re: Guardrail

Dear Mr. Barette:

It is the feeling of several parents of children at Roberts School that the playground area is in a dangerous location to the highway and that children may be unsafe. In consideration of that feeling, it is the wish of the Roberts School Trustees that some barrier be erected outside the fence enclosing the playground.

In talking to the highway department they said we should contact you and enlist your help in erecting a guardrail on the inside of the curve opposite the Y-Stop Convenience Store and the Roberts School Playground. Since it is a safety issue for school children, they felt you would be willing to do this.

Please let us know your feelings and what actions you could take regarding this as soon as possible.

Thank you,


Randy C. Durr
Superintendent

/dmt



Roberts School District #5

P O Box 78

Roberts, MT 59070

(406) 445-2421

FAX (406) 445-2506



September 15, 2005

Received
SEP 21 2005

Kadrmas Lee &
Kadrmas Lee & Jackson

Mike Wamboldt, Chief Engineer
Kadrmas, Lee & Jackson, Inc.
2611 Gabel Rd.
PO Box 80303
Billings, MT 59108-0303

RE: STPP 28-2(25)70 Corridor Study Red Lodge - N School Bus Turnarounds

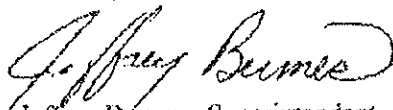
Dear Mr. Wamboldt:

Following our September 13th board meeting, the Roberts Board of Trustees has indicated that the turnarounds proposed by Board Member Joe Niemi to be the ones that we would like to request. Those turnarounds are at the following locations:

1. One mile north of Fox at the present State gravel pile
2. At the District boundary approximately three miles south of Boyd

The Board of Trustee feels that these two turnarounds would adequately provide the school district with the means of turning around safely. The district would like to reiterate the importance of these turnarounds in providing a safe environment for our children on our school buses.

Sincerely,

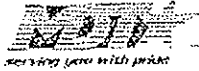

Jeffrey Bermes, Superintendent
Roberts School

Cc: File
Randy Wiener, Chairman, Board of Trustees

Jeff Bermes
Superintendent

Jalayne Obert
District Clerk

Randy Wiener
Chairman of the Board



Montana Department of Transportation

David A. Galt, Director
Judy Martz, Governor

Billings District Office
424 Morey Street
PO Box 20437
Billings, MT 59104-0437

#16
20

October 16, 2002

Roberts Public Schools
Attn: Randy C. Durr, Principal
PO Box 78
Roberts, MT 59070

Subject: Guardrail Request
Roberts School Grounds
US 212/P-28

Both the District Maintenance Chief and Traffic Engineer examined the playground area you requested for a possible guardrail installation. We also examined accident data from the Safety Section for the last 10 years and found no accident history at this location.

The roadway near your playground area has many safe features: It has speed limit control with flashing lights; there is a prominent school crossing with new school warning signs, and your playground area is on the inside of the curve; set outside our standard clear zone. The playground also has a good chain link fence separating it from the roadway, and has an irrigation channel skirting the south end of the playground; both of which are capable of restraining an errant vehicle in many cases.

National experience has determined that guardrail is a significant hazard in itself, and should only be used as a last resort. A vehicle that would normally come to a controlled stop off road, loses all control when contacting a guardrail or other barrier, and presents a significantly greater danger to people near the roadside as well as to the vehicle occupants.

While there is always the possibility of freak accident, your playground area has very reasonable protection features in place; and the existing potential hazards do not outweigh that foreseen for a guardrail installation. Our recommendation is not to install guardrail, or other similar barrier.

Respectfully,

Bruce H. Barrett
District Administrator - Billings

10p28robertsPS:smj

copies: Traffic File

Appendix D

May 2007 Agency Scoping

**List of Commenting Agencies
Corridor Study – Red Lodge North
Environmental Assessment
Carbon County, Montana**

<u>Federal Agencies</u>	<u>Letter #</u>
US Department of Agriculture – Natural Resources Conservation Service	1
US Department of Defense – Army Corps of Engineers, Omaha District.....	2
US Department of the Interior – Fish and Wildlife Service, Montana Field Office.....	3
 <u>State Agencies</u>	
Montana Department of Environmental Quality	4
Montana Fish, Wildlife and Parks	5
Montana Natural Heritage Program.....	6
 <u>Local Agencies</u>	
City of Red Lodge Parks Board	7
Montana Land Reliance.....	8 and 9

1

RECEIVED

MAY 17 2007

ENVIRONMENTAL

United States Department of Agriculture



Natural Resources Conservation Service
Federal Building, Room 443
10 East Babcock
Bozeman, MT 59715

MASTER FILE
COPY

Office: (406) 587-6811
Fax: (406) 587-6761

May 14, 2007

Ms. Heidy Bruner
Environmental Services
Montana Department of Transportation
P.O. Box 201001
Helena, Montana 59620-1001

Dear Ms. Bruner:

We are responding to your letter of May 2, 2007, requesting information for Project Number STPP 28-2(25)70, Reconstruction of State Highway 212, between Red Lodge and Boyd in Carbon County, Montana.

Your letter indicates that the Natural Resources Conservation Service (NRCS) had not responded to previous requests for information regarding this project. This statement is in error as Mr. Tony Rolfes, a Resource Soil Scientist for NRCS, responded on September 9, 2005, to the firm of Kadramas, Lee and Jackson, a consultant for the Department of Transportation on this project. The correspondence provided the status of important farmlands in the highway corridor. NRCS administers the Farmland Protection Policy Act which requires evaluation of impacts to important farmland as a result of federal actions to include federal funding.

Should you need assistance in locating this correspondence, please contact Mr. Gordon Hill, P.O. Box 510, Joliet, Montana 59041-0229. Mr. Hill's phone number is (406) 962-3641, Ext. 101.

A handwritten signature in blue ink that reads "Carrie Mosley".

CARRIE MOSLEY
Acting State Conservationist

cc:

Ronald Nadwornick, State Resource Conservationist, NRCS, Bozeman, Montana
Dennis Loreth, Assistant State Conservationist for Field Operations, NRCS, Bozeman, Montana
Gordon Hill, District Conservationist, NRCS, Joliet, Montana
Tony Rolfes, Resource Soil Scientist, NRCS, Bozeman, Montana

HELPING PEOPLE HELP THE LAND

An Equal Opportunity Provider and Employer



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
106 SOUTH 15TH STREET
OMAHA NE 68102-1618

May 17, 2007

#2
RECEIVED

MAY 22 2007

ENVIRONMENTAL

Planning, Programs, and Project Management Division

Ms. Heidy Bruner
Montana Department of Transportation
2701 Prospect Avenue
Helena, Montana 59620-1001

MASTER FILE
COPY

Dear Ms. Bruner:

The U.S. Army Corps of Engineers, Omaha District (Corps) has reviewed your letter dated May 2nd, 2007 regarding the proposed US Highway 212 improvements. The Corps offers the following comments:

It should be ensured that the addition to the proposed project is in compliance with flood plain management criteria of Carbon County and the State of Montana. As a minimum, the design should ensure that the 100-year flood water surface elevation of any stream affected that has a designated floodway, is not increased relative to pre-project conditions. If a designated floodway has not been identified then the design should ensure that the 100-year flood water surface elevation is not increased by more than 1-foot relative to pre-project conditions. It is desirable, however, that water surface elevations either remain the same or decrease as a result of this project.

Your plans should be coordinated with the U.S. Environmental Protection Agency, which is currently involved in a program to protect ground water resources. If you have not already done so, it is recommended you consult with the U.S. Fish and Wildlife Service and the Montana Department of Fish, Wildlife and Parks regarding fish and wildlife resources. In addition, the Montana State Historic Preservation Office should be contacted for information and recommendations on potential cultural resources in the project area.

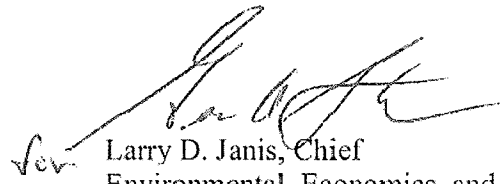
If construction activities involve any work in waters of the United States, a Section 404 permit may be required. For a detailed review of permit requirements, preliminary and final project plans should be sent to:

U.S. Army Corps of Engineers
Helena Regulatory Office
Attention: CENWO-OD-R-MT/Steinle
10 West 15th Street, Suite 2200
Helena, Montana 59626

-2-

If you have any questions, please contact Mr. Dave Crane at (402) 221-4882.

Sincerely,


for Larry D. Janis, Chief
Environmental, Economics, and
Cultural Resources Section
Planning Branch

3



United States Department of the Interior

FISH AND WILDLIFE SERVICE
ECOLOGICAL SERVICES
MONTANA FIELD OFFICE
585 SHEPARD WAY
HELENA, MONTANA 59601
PHONE (406) 449-5225, FAX (406) 449-5339

RECEIVED

JUN 12 2007

ENVIRONMENTAL

MASTER FILE
COPY

M.44 MDT (I)

June 8, 2007

Heidy Bruner
Montana Department of Transportation
Environmental Services
2701 Prospect Avenue
PO Box 201001
Helena, Montana 59620-1001

Dear Ms. Bruner:

Thank you for your May 2, 2007 letter in which you invited comments from the US Fish and Wildlife Service (Service) relative to the Montana Department of Transportation's (Department) Red Lodge North Corridor Study (STPP 28-2(25)70; Control No. 4375). Proposed corridor improvements would occur along approximately 21.2 miles of US Highway 212 from Red Lodge to Boyd in Carbon County, Montana. Your letter referenced a letter from the Service to the Department dated March 25, 2002 pertaining to this project, and asked if that information was still current and if the Service had additional project-related comments.

A review of our file for this project indicates that in addition to our March 25, 2002 letter to your office, we also issued a letter to the Department on May 12, 2005 (enclosed) in which we concurred with the Department's determination that the proposed actions in that corridor would not be likely to adversely affect federally-listed threatened or endangered species. To the best of our knowledge, this information is still current and no further consultation is required pursuant to Section 7 of the Endangered Species Act. If the Department has new information related to the effects of this proposed action on federally-listed species, consultation with the Service should be reinitiated.

We appreciate the opportunity to comment on this project. If you have questions related to this letter, please contact Scott Jackson at (406)449-5225, extension 201.

Sincerely,

R. Mark Wilson
Field Supervisor

Enclosure



United States Department of the Interior

FISH AND WILDLIFE SERVICE
ECOLOGICAL SERVICES
MONTANA FIELD OFFICE
100 N. PARK, SUITE 320
HELENA, MONTANA 59601
PHONE (406) 449-5225, FAX (406) 449-5339

M.44 MDT (I)

May 12, 2005

Paul Sturm
Montana Department of Transportation
Environmental Services
2701 Prospect Avenue
P.O. Box 201001
Helena, Montana 59620-1001

Dear Mr. Sturm:

This is in response to your letter dated April 14, 2005, in which you requested the U.S. Fish and Wildlife Service's (Service) concurrence with your determination that the Montana Department of Transportation's (Department) proposed improvements to U.S. Highway 212, primarily between the towns of Red Lodge and Boyd in Carbon County, Montana (STPP 28-2(25)70; Control No. 4375), would not be likely to adversely affect federally-listed threatened or endangered species. This proposed project would entail reconstruction of 21.3 miles of U.S. Highway 212 and would include both urban and rural sections. Your letter stated that the Department intends to phase this proposed project under two or more construction projects, depending on the availability of funding and that your determinations of effect and concurrence request pertain to the entire road corridor. However, as each construction phase is designed, the Department would submit plans for that section to the Service to see if any new information would necessitate reinitiation of consultation.

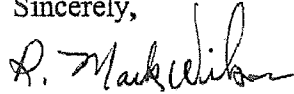
Your letter transmitted a biological assessment (BA) for this project that concluded that this project would not be likely to adversely affect threatened bald eagles (*Haliaeetus leucocephalus*) and would not be likely to jeopardize the continued existence of the Yellowstone non-essential experimental population of gray wolves (*Canis lupus*). Based on information provided in your letter and the BA for this project, the Service concurs with the Department's determination that this project, as proposed, would not adversely affect listed species. This concurrence is based upon the projects in this corridor being designed and constructed as described and upon implementation of the coordination measures stated in the BA that are intended to protect listed species. These measures should be implemented for each separate project that is constructed within this corridor. In addition, we acknowledge your determination that this project would not affect endangered black-footed ferrets (*Mustela nigripes*).

This concludes informal consultation pursuant to regulations 50 CFR § 402.13 implementing the Endangered Species Act (Act). This project should be re-analyzed if new information reveals

effects of the action that may affect threatened or endangered species or if the project is modified in a manner that causes an effect not considered in this consultation.

If you have questions about this letter or your responsibilities under the Act, please contact Scott Jackson at (406) 449-5225, extension 201.

Sincerely,

A handwritten signature in dark ink, appearing to read "R. Mark Wilson". The signature is fluid and cursive, with a large, stylized "W" at the end.

R. Mark Wilson
Field Supervisor

Copy to: FWS-ES, Billings Suboffice

**Red Lodge North
Record of Telephone Conversation**

Date: 06/11/07 2:25 p.m.

Project Number: 2201102

Recorded By: Becky Rude

Phase Number:

◆.....◆

Talked With: Kent Harris

Representing: MDEQ

Address:

City: State: Zip:

Phone Number: 406-841-5048

Email:

◆.....◆

Subject of Conversation: The Ski Station underground storage tank

Items Discussed:

Mr. Harris returned my phone call regarding the history of the Ski Station (Site 6015056). There is no report for KLJ to obtain. Kirth Erickson was present when the kerosene tanks were removed from the ground. Nine soil samples were taken using the EPH method and the highest levels recorded were 1300 ppm and 640 ppm. They dug up everything that they could and Mr. Harris believes it would be very unlikely that we would come into contact with contaminated soil during the construction of our project.

◆.....◆

Distribution: ☐ KL&J (Names)
☐ (Names)

#5

From: Charlotte Brett [charlotte.brett@kljeng.com]

Sent: Friday, May 11, 2007 4:04 PM

To: mike.wamboldt@kljeng.com; 'Becky Rude'

Subject: FW: 4375; STPP 28-2(25)70; Red Lodge North --Phone Response from MT FWP

-----Original Message-----

From: Bruner, Heidy [mailto:hbruner@mt.gov]

Sent: Friday, May 11, 2007 4:50 PM

To: Priebe, Gabe; charlotte.brett@kljeng.com

Cc: Bruner, Heidy; Semmens, Bill

Subject: 4375; STPP 28-2(25)70; Red Lodge North --Phone Response from MT FWP

Hi Folks:

We received a phone message from Jim Olsen of MT FWP (328.4636) confirm that he is aware of no additional impacts or concerns related to this project.

Cheers,
Heidy

Heidy Bruner
Great Falls District Project Development Engineer
MDT Environmental Services
406.444.7203

#6



P.O. Box 201800 • 1515 East Sixth Avenue • Helena, MT 59620-1800 • fax 406.444.0581 • tel 406.444.5354 • <http://mtnhp.org>

August 17, 2007

Becky Rude
Kadrmass, Lee & Jackson, Inc.
PO Box 937
Valley City, ND 58072-0937

Dear Becky,

I am writing in response to your request for information on plant and animal species of special concern in the vicinity of U.S. Highway 212 from Red Lodge to Boyd. We checked our databases for information in this general area and have enclosed 6 species of concern reports, 8 animal inferred extent reports, 4 ecological site reports, one map and explanatory material.

Please keep in mind the following when using and interpreting the enclosed information and maps:


- (1) These materials are the result of a search of our database for species of concern that occur in an area defined by requested road segment with an additional one-mile buffer surrounding the requested area. This is done to provide a more inclusive set of records and to capture records that may be immediately adjacent to the requested area. Reports are provided for the species of concern that are located in your requested area with approximately a one-mile buffer. Species of concern outside of this area may be depicted on the map but are not reported.
- (2) On the map, polygons represent one or more source features as well as the locational uncertainty associated with the source features. A source feature is a point, line, or polygon that is the basic mapping unit of an EO Representation. The recorded location of the occurrence may vary from its true location due to many factors, including the level of expertise of the data collector, differences in survey techniques and equipment used, and the amount and type of information obtained. Therefore, this inaccuracy is characterized as locational uncertainty, and is now incorporated in the representation of an EO. If you have a question concerning a specific EO, please do not hesitate to contact us.
- (3) This report may include sensitive data, and is not intended for general distribution, publication or for use outside of your agency. In particular, public release of specific location information may jeopardize the welfare of threatened, endangered, or sensitive species or communities.

- (4) The accompanying map(s) display management status, which may differ from ownership. Also, this report may include data from privately owned lands, and approval by the landowner is advisable if specific location information is considered for distribution. Features shown on this map do not imply public access to any lands.
- (5) **Additional information on species habitat, ecology and management is available on our web site in the Plant and Animal Field Guides, which we encourage you to consult for valuable information. You can access these guides at <http://mtnhp.org>. General information on any species can be found by accessing the link to NatureServe Explorer.**

The results of a data search by the Montana Natural Heritage Program reflect the current status of our data collection efforts. These results are not intended as a final statement on sensitive species within a given area, or as a substitute for on-site surveys, which may be required for environmental assessments. The information is intended for project screening only with respect to species of concern, and not as a determination of environmental impacts, which should be gained in consultation with appropriate agencies and authorities.

I hope the enclosed information is helpful to you. If in the future you would prefer to receive a digital PDF file instead of paper, just let know. Please feel free to contact me at (406) 444-3290 or via my e-mail address, below, should you have any questions or require additional information.

Sincerely,



Martin P. Miller
Montana Natural Heritage Program
martinm@mt.gov

#7

To:
Bruce Barrett
MDT Billings District Administrator
424 Morey St.
PO Box 20437
Billings, MT 59104-0437
bbarrett@mt.gov

September 24, 2007

Dear Mr. Barrett,

The City of Red Lodge Parks Board appreciates the chance it had to meet on August 22 with MDT personnel Leroy Wosoba and Gary Neville at Red Lodge to discuss CTEP project opportunities in the Red Lodge area. We also appreciate the May 2, 2007 letter from Heidi Bruner requesting comments on the Highway 212 Corridor Study. The City of Red Lodge Parks Board looks forward to working with MDT to accommodate current and future transportation needs in Carbon County.

The City of Red Lodge Parks Board requests that MDT consider trails planned in the 2006 City of Red Lodge Comprehensive Trails Plan (RLTP) and that trails associated with highway projects be constructed according to the RLTP. This plan included extensive public involvement and participation. The RLTP has been officially adopted by the City of Red Lodge. MDT officials were provided a copy of the RLTP at our 8/22/07 meeting. Additionally, the RLTP is available online at:
<http://www.beartoothtrails.org/RLTrailPlan.pdf>.

In addition, we ask that MDT consider the following comments, issues and concerns regarding MDT's Highway 78 (including the Highway 78 Corridor Study and the Red Lodge Northwest Project Number STPP 78-1-(8)-0), and scheduled studies and improvements on US Highway 212 (including the Corridor Study for the Red Lodge North Project Number STPP 28-2(25)70) and Highway 308:

1. **Alternative transportation** – MDT's reconstruction of Highways 212 and 78 should accommodate alternative transportation needs. The City of Red Lodge Parks Board requests that a non-motorized trail be developed and constructed adjacent to or near the Highway 78 and 212 corridors. Trails should meet needs for pedestrians, bicyclists, wheelchairs, and other non-motorized human traffic. Trails along Highways 212 and 78 should connect to trails and trail segments leading into the City of Red Lodge, outlying subdivisions, and other communities and subdivisions in Carbon and Stillwater Counties. The City of Red Lodge Parks board encourages MDT to eventually develop trails along Highway 212 from the Wyoming border to Laurel. Given that highway reconstruction projects do not often occur, it is imperative that such projects be planned and constructed

to accommodate future growth and demand for alternative transportation, recreation needs, and potential visual concerns.

2. **Parking** – Regularly spaced parking facilities should be developed within highway right-of-ways along the Highway 212 and 78 corridors. This could be accomplished by retaining abandoned sections of highway, ensuring regularly spaced turnouts, and by constructing wide parking areas at junctions with secondary roads. Parking areas will provide opportunities for car pool users to park cars, safer school bus stops, future rest areas, and trail user parking along trail systems and equestrian routes/trails. Such parking areas should include signs indicating parking opportunities and also informational signs, such as roadside history, environmental interpretation, or providing information about the incredible scenery along both these highways. The City of Red Lodge Parks board would be willing to assist MDT in developing language for such signs.
3. **Brewery Hill trail** – As detailed on pages 27 to 28 of the RLTP, “MDT officials have publicly stated their desire to construct a pedestrian/bike path that would promote travel along Brewery Hill but not directly adjacent to Highway 78. MDT has cited environmental and engineering constraints as a deterrent to adding a pedestrian/bike path adjacent to the road corridor. This plan suggests two possible alternative routes to avoid a pedestrian/bike path directly adjacent to Highway 78/Brewery Hill.” Potential RLTP routes include two options connecting the West Bench area to the downtown Red Lodge area. The City of Red Lodge Parks board would be willing to assist MDT in working with private property owners to secure any easements needed for these routes.
4. **Trail accessibility** – The City of Red Lodge Parks Board recommends that trails adjacent to Highways 212 & 78 provide maximum accessibility for the widest variety of user groups. As stated in the RLTP, “Accessible trails benefit not only people with mobility impairments, but older adults and families with young children. Designing a trail to accommodate bicyclists inherently creates a facility which is accessible to mobility impaired individuals. Such accessible trails are generally paved with asphalt or concrete, but may also use prepared surfaces such as aggregate or soil stabilizing agents mixed with native soils or aggregates. Critical features to consider for accessible trails include grade, cross slope, width, surface, and vertical clearance. Wherever possible, trails should meet grade, cross slope, tread width, tread obstacle, and surface material standards, such as those detailed in the US Department of Transportation Federal Highway Administration publication ‘Designing Sidewalks and Trails for Access.’”
5. **Road shoulders** – The road corridor should include road shoulders on both sides of the highway that are wide enough to safely accommodate bicycle use. This would allow road bicyclists to travel at high speeds along the highway in a corridor and keep this higher-speed non-motorized traffic separate from that of any trail system traffic and separate from automobile traffic.

6. **Equestrian use** – The City of Red Lodge Parks Board encourages MDT to retain or purchase roadside easements adjacent to highways that will allow development of an equestrian trail system. A trail or corridor adequate for equestrian use should be large enough to accommodate two-way horse traffic while keeping equestrian traffic separated from other users, such as pedestrians, people walking dogs, and bicyclists.
7. **Environmental impacts** – The City of Red Lodge Parks Board recommends that, in designing and constructing this trail, MDOT mitigate or eliminate impacts to the environment. This includes consideration of impacts to water quality, wetlands, sensitive plant species, noxious weed proliferation, wildlife, cultural resources, air quality, etc. Specific considerations should include:
 - a) Hydrologic impacts - ensuring that bridge replacements, in-stream work, and construction activities do not adversely impact water quality or fisheries in East Rosebud Creek, Willow Creek (which is listed as impaired under section 303 d of the Clean Water Act), Red Lodge Creek, Rock Creek or adjacent wetlands and riparian areas. New culverts or bridge replacements should accommodate the passage of fish, amphibians, and other riparian-dependent species that are known to be present in each specific stream or riparian areas. Wherever possible, impacts to wetlands (both isolated wetlands and wetlands connected to flowing streams) and riparian areas should be avoided. Where this is not possible, wetland mitigation or improvement elsewhere should occur. In the event that wetland or stream mitigation sites are needed, the City of Red Lodge Parks Board would be interested in working with MDOT to locate potential wetland or riparian mitigation sites in and adjacent to City of Red Lodge property. It is likely that several such sites could be identified along Rock Creek in Red Lodge.
 - b) Surveying for noxious weed presence - any detection of noxious weeds should include completion of chemical and/or mechanical weed treatment within and immediately adjacent to road corridor areas that will be disturbed. Proliferation of noxious weeds along the road and/or trail corridor could potentially lead to the spread of weeds into City of Red Lodge Parks and elsewhere in Carbon County and Montana.
 - c) Revegetation of disturbed areas – to prevent introduction of noxious weeds and reduce impacts to native grassland species, prompt revegetation of disturbed areas should occur. This should include seeding or hydroseeding of disturbed areas and roadside ditches with mixes of native plant species appropriate to this area. All seed used should be certified as noxious weed free. Visually attractive native species, such as blue flax, blanket flower, cone flower, lupine, etc. should be included in seed mixes adjacent to any trail corridor. Where they will not interfere with highway visibility standards, willow slips and/or native deciduous tree seedlings should be planted adjacent to any disturbed riparian areas or irrigation ditches. In areas devoid of organic material, we recommend that MDOT consider use of topsoil placement, mulching, and/or hydroseeding. Revegetation efforts should be monitored until revegetation occurs. Criteria defining revegetation should be defined specific to each project and a revegetation monitoring plan should be

developed. Such a plan should include means for additional seeding and revegetation efforts in the event that initial methods are not fully successful.

- d) Wildlife impacts – to reduce impacts to wildlife, we recommend that seed used for revegetation consist primarily of species deemed less palatable or desirable to wildlife. We also suggest that MDOT consider the use of wildlife fences and/or wildlife crossing structures to reduce potential for auto/wildlife collisions.
- e) Air quality – please ensure that construction and related activities in and near Red Lodge and other population centers include measures to address impacts to air quality, such as dust abatement.
- f) Recycling – we encourage MDOT to utilize recycling technology, such as crushed glass, recycled pavement, or shredded tires, to reconstruct highways and construct any associated trails.
- g) Salvage of trees – the Parks Board requests that MDT allow the salvage of trees and shrubs that will be removed as part of highway reconstruction or ongoing highway right-of-way clearing in the area. Such trees and shrubs could be transplanted to City of Red Lodge property, including parks and street sides. This would not only save the trees and save City money for the purchase of new trees, but it would also provide a myriad of environmental and social benefits associated with placement of urban vegetation in neighborhoods and parks. Since fall or early spring would provide the best opportunities for transplant survivability, we would appreciate advance notice of any such salvage availability. This would allow scheduling of a professional arborist or tree service to salvage and transplant the trees. It may also be advantageous to allow tree salvage a year or two in advance of construction to ensure that salvage operations don't interfere with construction activities. We would also appreciate information on any applicable safety measures, such as signing or the use of flaggers, that would be required for this type salvage operation.

- 8. Use of abandoned road infrastructure for new trails** – In the event of road relocation or road segment relocation, the City of Red Lodge Parks Board encourages MDOT to locate trails or trail segments in areas currently occupied by highway infrastructure. Examples would include use of existing pavement, bridges, and culverts that will no longer be used by motorized traffic as part of the Highway 78 or 212 highways. Sections of abandoned pavement could also be utilized as parking areas, roadside parks, viewing platforms, or rest areas. Such use of portions of the highway to be abandoned would decrease costs of trail construction and costs of reclaiming these areas. In the event that such abandoned portions of the highway cannot be utilized for trail construction, we recommend that infrastructure (i.e. pavement, culverts, bridges, etc.) be removed and the areas are reclaimed and revegetated so as to prevent future erosion and/or noxious weed spread.

Please feel free to contact myself or any Parks Board members if you have any questions or need more information relating to City of Red Lodge trails or parks. Thank you for this opportunity to comment on the Highway 212 and 78 projects.

Please continue to keep the City of Red Lodge Parks Board on the mailing and meeting notification lists for all ongoing and future MDT or FHWA projects occurring in Carbon County on Highways 212, 78, and 308.

Sincerely,

/S/ DAN SEIFERT

Dan Seifert,
Red Lodge Parks Board Chairman
e-mail: danerinn@copper.net; phone: 406-446-1902
for The City of Red Lodge Parks Board
c/o City of Red Lodge
PO Box 9
Red Lodge, MT 59068

8

The Montana LAND RELIANCE

MASTER FILE
COPY

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MAY 11 2007

ENVIRONMENTAL

May 10, 2007

Heidy Bruner
Montana Dept. of Transportation
P.O. Box 201001
Helena, MT 59620

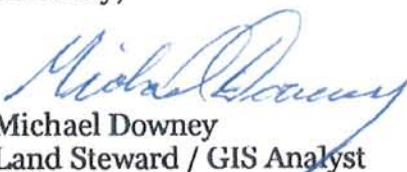
Re: Request for Information – Project #STTP 28-2(25)70

Dear Ms. Bruner:

I just wanted to follow-up with you from your letter of 5/2/07. I appreciate the heads-up regarding the highway expansion on US 212. The Montana Land Reliance currently holds conservation easements on three properties that may be impacted by your planned activities. The issue of greatest concern would be the acquisition of additional right-of-way. Generally, it is MLR's policy to cooperate to the greatest extent possible on these projects. The problem we face is that in order for you to proceed absent a condemnation proceeding, we will have to go through the appropriate steps necessary to extinguish the easement on the property taken-up by the ROW. This can be a lengthy process for us and will require that you submit the appropriate documentation proving the public necessity for the action. As you plan for this project, you should anticipate a couple of months lead time in order for us to gain the necessary approvals from our own staff and Board of Directors prior to signing a quitclaim for the ROW.

Please let me know if you have any additional questions or concerns regarding this matter. The attached map should give you a good idea of the conservation easements we hold in this area. You can reach me at 443-7027 or via email at: michael@mtlandreliance.org

Sincerely,


Michael Downey
Land Steward / GIS Analyst

GLACIER FLATHEAD OFFICE

470 Electric Ave. • PO Box 460
Bigfork, Montana 59911-0460
406/837-2178 • Fax 406/837 4980
email mlrnf@mtlandreliance.org

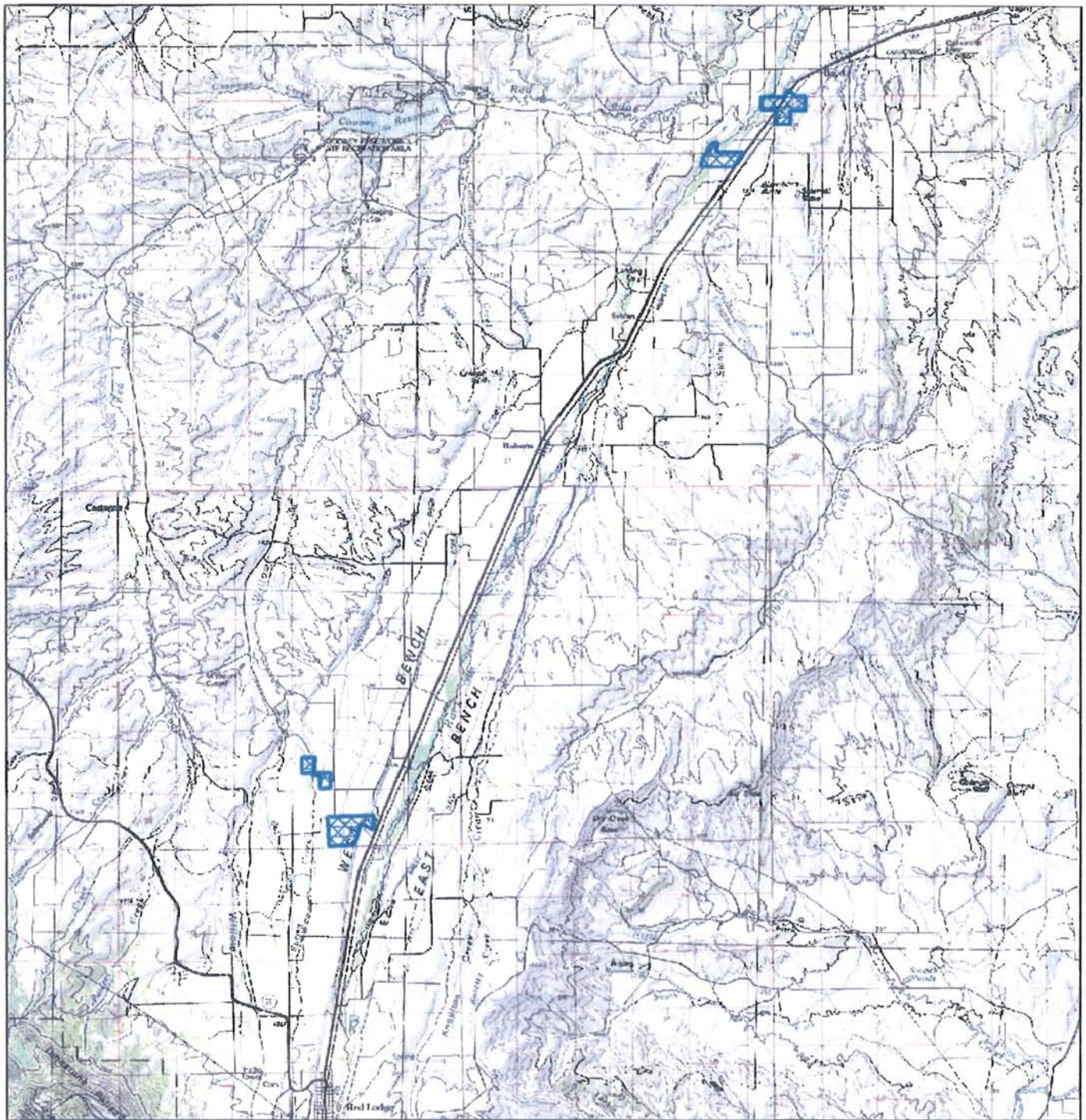
MAIN OFFICE

324 Fuller Ave. • PO Box 355
Helena, Montana 59624-0355
406/443-7027 • Fax 406/443-7061
email info@mtlandreliance.org

EASTERN OFFICE

3318 3rd Ave. N., Suite 207 • PO Box 171
Billings, Montana 59103-0171
406/259-1328 • Fax 406/259-1437
email mlrb@mtlandreliance.org

MLR Projects along U.S. Hwy 212



0 1 2 3 4
Miles
Scale: 160,000

Date: May 7, 2007

 MLR Easement

Disclaimer: information provided on this map is for illustrative purposes only and should not be relied upon to identify legal boundaries.

9

Red Lodge North Record of Telephone Conversation

Date: 6/12/2007 12:05 p.m.

Project Number: 2201102

Recorded By: Becky Rude

Phase Number:

Talked With: Michael Downey

Representing: Montana Land Reliance

Address:

City: State: Zip:

Phone Number: 406-443-7027

Email: michael@mtlandreliance.org

Subject of Conversation: Easements

Items Discussed:

Mr. Downey informed me that none of the easements identified along Highway 212 are Section 4(f) properties. He also informed me that the northernmost parcel probably has the correct lines, even though it does go over the roadway, but MDT likely has an easement for right-of-way. He said typically in the older easements MDT purchases a greater amount of right-of-way than what that right-of-way easement provides.

Distribution: ☐ KL&J (Names)
☐ (Names)

Appendix E

Cultural Resources

2003040801



Montana Department of Transportation

David A. Galt, Director
Judy Martz, Governor

RECEIVED

701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001

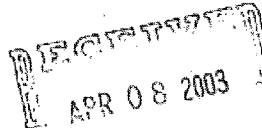
April 4, 2003

APR 24 2003

ENVIRONMENTAL

Mark Baumlert, Ph.D.
State Historic Preservation Office
1410 8th Avenue
P O Box 201202
Helena, MT 59620-1202

Subject: STPP 28-2(25)70
Corridor Study - Red Lodge North
Control No. 4375



BY:

Josef
MDT
Corridor Study
Red Lodge!

Enclosed is the Determination of Effect for the above project in Carbon County. We have determined that the proposed project would have No Effect to Finley House (24CB1822), the Richardson Bungalow (24CB1287), the Montana Dakota Grain Company Elevator (24CB1830), the Dairy Delite Drive-In (24CB1833), the O'Shea House (24CB1705), the Silakka House (24CB1712), the Boyd Mercantile (24CB1831), and the Maryott Ranch/Carbon County Dairy (24CB1336). There would be No Adverse Effect to the St. Thomas Church (24CB1717), the Monahan House (24CB1720), the Kent Dairy Round Barn (24CB1320), and the Maryott Residence (24CB1339). There would be No Effect to the Red Lodge Commercial Historic District (24CB145) and the Hi Bug Historic District (24CB1030). We request your concurrence.

If you have any questions, please contact me at 444-6258.

Jon Axline
Jon Axline, Historian
Environmental Services

Enclosure

cc: Bruce Barrett, Billings District Administrator
Carl Peil, P.E., Preconstruction Bureau
Gordon Stockstad, Resources Section

CONCUR
MONTANA SHPO
DATE 22 Apr 03 SIGNED [Signature]

Received

JUN - 6 2003

Kadrmass Lee & Jackson

file: MDT/2003

#2

Montana Department of Transportation

David A. Galt, Director

Judy Martz, Governor

2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001**MASTER FILE
COPY**

September 10, 2003

Mark Baumler, Ph.D.
State Historic Preservation Office
1410 8th Avenue
P O Box 201202
Helena, MT 59620-1202Subject: STPP 28-2(25)70
Corridor Study - Red Lodge North
Control No. 4375Josef
MDT
REALIGN NORTH
EFFECT TO 24CB1283
A PACIFIC RAILWAY**CONCUR
MONTANA SHPO**DATE 25 Sep 03 SIGNED *[Signature]*

On April 4, 2003, we submitted a Determination of Effect to your office describing impacts to twelve historic sites located in the Area of Potential Effect (APE) for the above project in Carbon County. You concurred with our determination on April 22, 2003. However, we inadvertently omitted assessing effects to the Rocky Fork Branch of the Northern Pacific Railway (24CB1283).


The Rocky Fork Branch was completed in 1889 and functioned primarily as a coal and agricultural carrier between Red Lodge and the rail yards/junction at Laurel. In 1983, the railroad abandoned the line with sections of the grade returned to agricultural use by adjacent landowners, converted into a roadbed or allowed to deteriorate. The Rocky Fork Branch was determined eligible for the National Register of Historic Places under Criterion A in 1992.

What remains of the abandoned grade parallels much of the above 20± mile project area. While most of it lies outside the proposed R/W and construction limits boundary, approximately 2.8-miles of non-continuous abandoned railroad grade lies within the project area and may be impacted by the proposed project. The grade would be impacted by realignment and widening of the existing roadway.

We have determined, however, that the proposed project would have No Adverse Effect to the NRHP-eligible Rocky Fork Branch Line (24CB1283). The line was abandoned in 1983 with the segment north of Rockvale to Laurel still active and maintained by the Burlington Northern-Santa Fe Railroad. The 32-mile segment south of Rockvale, however, has been significantly impacted since 1983. The bridges, rails, ties, ballast and associated features (i.e. spikes, tie plates, signal masts, etc.) have been long removed from the line. However, depots and grain elevators still exist in Red Lodge, Fox, and Roberts. Segments of the line have been converted into local access roads or were turned over to adjacent landowners who either allowed it to deteriorate or otherwise obliterated the line. Other segments have been abandoned and are deteriorating from lack of maintenance. There has also been considerable residential development within the corridor, which has further impacted the integrity of the railroad line.

Based on the existing condition of the line, the proposed project would not significantly alter its appearance, integrity, or ability to convey its historic significance to the development of Rock Creek valley. The most intact segments south of Roberts are located outside the proposed R/W boundary and are not included within the construction limits of the project. Those segments are currently being used as local access roads and would be perpetuated. There are no railroad-related structures that would be impacted by the project. The setting would not be adversely effected in that residential and commercial development all along the line in the project area over the last 20 years has already had a significant impact to the setting of the area. Because of the Rocky Fork branch line's significance to the development of Red Lodge and the Rock Creek valley, the MDT would install an interpretive marker adjacent to U.S. 212 near where a relatively intact segment of the line remains. We request your concurrence that the proposed project would have **No Adverse Effect** to the Rocky Fork Branch of the Northern Pacific Railroad (24CB1283).

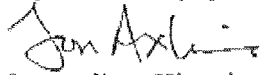
If you have any questions, please contact me at 444-6258.



Jon Axline, Historian
Environmental Services

cc: Bruce Barrett, Billings District Administrator
Carl Peil, P.E., Preconstruction Bureau
Bonnie Steg, Resources Section

If you have any questions, please contact me at 444-6258.



Jon Axline, Historian
Environmental Services

cc: Bruce Barrett, Billings District Administrator
Tom Martin, P.E., Consultant Design
Bonnie Steg, Resources Section



RECEIVED

JUN 14 2005

May 19, 2005 ENVIRONMENTAL

Montana Department of Transportation

2701 Prospect Avenue
PO Box 201001
Helena, MT 59620-1001

2005052001

Jim Lynch, Director
Brian Schweitzer, Governor

Mark Baumler, Ph.D.
State Historic Preservation Office
1410 8th Avenue
P O Box 201202
Helena, MT 59620-1202

Subject: STPP 28-2(25)70
Red Lodge - North Corridor Study
Control No. 4375

CONCUR
MONTANA SHPO

DATE 10 Jun 05 SIGNED

Dear Mark:

The MDT has programmed a project to reconstruct 19.81 miles of U.S. Highway 212 from the north side of Red Lodge to the community of Boyd. On September 10, 2003, your office concurred with our Determination of Effect regarding the historic properties located along that segment of the highway. There are eleven privately-owned irrigation ditches located along that segment of the highway. They are: the Brandt Ditch (24CB1722), Rule-Thompson Ditch (24CB1723), Duncan-Aiken Ditch (24CB1724), Bernhardt Ditch (24CB1725), Hunts Ditch (24CB1726), Highline Ditch (24CB1727), Rooney Ditch (24CB1728), Drakes Ditch (24CB1729), Ward Ditch (24CB1730), Carbonado Ditch (24CB1731), and the Hoyle Ditch (24CB1761). Site forms for these ditches are included in Laurie Travis, "Red Lodge North, Highway Improvements: A Cultural Resource Inventory from Roberts to Boyd, Carbon County, Montana," (Metcalf Archaeological Consultants, October, 2002). Based on their contribution to the agricultural development of the lower Rock Creek Valley, the ditches are eligible for the National Register of Historic Places under Criterion A.

U.S. Highway 212 was originally constructed in 1936 and 1939 to provide a connection between U.S. 10, Red Lodge, and the recently completed Beartooth Highway. The roadway was last reconstructed in 1985 and all the culverts that would be impacted as part of this job were installed at that time. The Reinforced Concrete Pipe culverts proposed for this project are of the same dimensions as those installed in 1985. The culverts are, moreover, part of the roadway and not part of the ditch system. The following is a list of the ditches, the proposed impacts to them, and the effects of the proposed project on them.

Brandt Ditch (24CB1722). It is the intent of the project to replace the existing corrugated steel pipe (CSP) with a reinforced concrete pipe (RCP). The ditch is approximately two miles in length and would not be rechanneled where it crosses under U.S. Highway 212. The existing and historic function of the ditch would be perpetuated as would its alignment where it crosses under the roadway. None of the criteria of Adverse Effect could be applied to this ditch as a result of the project. The proposed project would, therefore, have No Effect to the Brandt Ditch.

file: MDT/2005

The Rule-Thompson Ditch (24CB1723) is about 2½ miles in length and consists of a crude field irrigation ditch. The MDT intends to replace the existing RCP crossing under the roadway with a new RCP as part of the project. In addition, about 180-feet of ditch would be rechanneled to accommodate a new crossing under the roadway. This constitutes 1.3% of the entire length of the ditch. Evidence suggests that the ditch was originally rechanneled in 1936 to accommodate the roadway. There would not be a significant change in the setting of the ditch as a result of the project and its existing and historic function would be perpetuated. The proposed width of the rechanneled portion of the ditch would match the existing width of the facility. There would be **No Adverse Effect** to the Rule-Thompson Ditch as a result of the project.

The Duncan-Aiken Ditch (24CB1724) is approximately 3 miles in length and also consists of a small field ditch. The MDT intends to replace the existing CSP with a new RCP at the point where the ditch crosses under U.S. Highway 212. The ditch would not be rechanneled to accommodate the pipe. The setting of the site would be retained and the historic function of the ditch perpetuated. There would be **No Effect** to the Duncan-Aiken Ditch as a result of the proposed project.

The Bernhardt Ditch (24CB1725) is about 1½ miles in length and is similar in design, appearance, and usage. According to the preliminary plan sheets, the existing culvert would not be replaced as part of the proposed project. There would be no change in the alignment of the ditch and no alteration of its current dimensions or use as a field ditch. There would, therefore, be **No Effect** to the Bernhardt Ditch as a result of the project.

The Hunts Ditch (24CB1726) crosses under U.S. Highway 212 at two points in Section 29, T5S, R21E. The ditch has a total length of about two miles and is similar in appearance to the Bernhardt Ditch. It is the intent of the MDT to replace the existing CSP's with RCP's. About 351-feet of ditch would also be rechanneled to accommodate the crossings. This constitutes about 3.3% of the total length of the ditch. There would not, however, be any change in the function of the facility and it would continue to provide water to adjacent farmlands near the roadway. The ditch, moreover, was rechanneled in 1936 when the roadway was originally constructed. The setting of the site would remain intact as would the majority of the alignment and configuration of the ditch. The MDT project would have **No Adverse Effect** to the Hunts Ditch.

The Highline Ditch (24CB1727) roughly parallels U.S. Highway 212 for 10± miles in Section 21, T5S, R21E. It is the intent of the MDT to replace the existing RCP with a new RCP. The project would also include the rechanneling of 148-feet of the 52,800± foot ditch. This would constitute about .24% of the entire ditch system. There would be no change in the historic function of the ditch and it would continue to irrigate farm fields in central Carbon County. The dimensions of the rechanneled portion of the ditch would closely match the existing width and depth of the facility. There would be no significant change in the setting of the facility. The proposed MDT project would, therefore, have **No Adverse Effect** to the Highline Ditch.

The Rooney Ditch (24CB1728) is 3± miles in length and carries water to agricultural property in the general vicinity of U.S. Highway 212. The MDT intends to replace the

existing RCP with a new RCP. Along with the RCP, it is the intent of the project to rechannel about 754-feet of the ditch to better accommodate the new pipe. There would be no change in the historic function of the ditch, which was originally rechanneled in 1936 because of highway construction. The dimensions of the rechanneled portion of the ditch would closely match the segments located outside the project area. The setting of the property would also remain largely intact. The proposed project would have **No Adverse Effect** to the Rooney Ditch.

Drakes Ditch (24CB1729) is a small field ditch that is about two miles in length and carries water to one or two users. It is the intent of the MDT to replace the existing RCP with a new RCP and rechannel about 207-feet of the ditch to accommodate the new pipe and improve its hydraulics. This would constitute 1.9% of the entire length of the system. The ditch would continue to function in its historic capacity as a ditch and there would be no change to most of the facility. The dimensions of the rechanneled portions of the ditch would closely match the unchanged segment of the facility. There would be no change in the setting of the ditch. There would be **No Adverse Effect** to the Drakes Ditch.

The **Ward Ditch (24CB1730)** is approximately five miles in length and irrigates farmland for one or two users in Section 2, T5S, R21E and Section 35, T4S, R21E. The MDT intends to replace the existing RCP with a new RCP that would better accommodate the hydraulics of the site. About 541-feet or 2% of the ditch would be rechanneled in conjunction with the installation of the new pipe. There would be no change in the historic function or capacity of the ditch as a result of the project. The setting of the historic property would also remain largely intact with most of the ditch located outside the APE of the project. The setting would also remain intact. The proposed MDT project would have **No Adverse Effect** to the Ward Ditch.

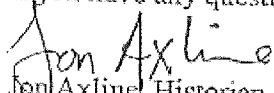
The **Carbonado Ditch (24CB1731)** is also about five miles in length and carries water to one or two users in the lower Rock Creek valley. It is the intent of the project to replace the existing RCP with a new RCP and rechannel 105-feet of the ditch to accommodate the replacement. That would constitute about .39% of the entire length of the ditch. The historic function and capacity of the ditch would be perpetuated with more than 99% of the ditch located outside the APE of the project. The proposed project would have **No Effect** to the Carbonado Ditch.

About three miles of the **Hoyle Ditch (24CB1761)** is located near the Red Lodge – North project area with about 2,500-feet located within the existing R/W of U.S 212. It is the intent of the project to relocate 2,401-feet of the ditch outside the R/W boundary and, thus, remove, a hazard adjacent to the road. The existing ditch parallels the roadway. The proposed new alignment would also parallel the existing alignment – except it would be located outside the R/W line. There would be no change in the historic function of the ditch and its dimensions would be matched for its new alignment. None of the criteria for **Adverse Effect** would apply to the rechanneling and the proposed project would have **No Adverse Effect** to the Hoyle Ditch.

In summary, the proposed project would have **No Effect** to 24CB1722, 24CB1724, 24CB1725, and 24CB1731. There would be **No Adverse Effect** to 24CB1723,

24CB1726, 24CB1727, 24CB1728, 24CB1729, 24CB1730, and 24CB1761. We request your concurrence.

If you have any questions, please contact me at 444-6258.


Jon Axline, Historian
Environmental Services

cc: Bruce Barrett, Billings District Administrator
Tom Martin, P.E., Consultant Design
Bonnie Steg, Resources Section



RECEIVED

Montana Department of Transportation

JUL 14 2005

2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001

Jim Lynch, Director
Brian Schweitzer, Governor

ENVIRONMENTAL

June 28, 2005

Mark Baumler, Ph.D.
State Historic Preservation Office
1410 8th Avenue
P O Box 201202
Helena, MT 59620-1202

BY: TH PO

• JCSH
• MDT
• CORRIDOR STUDY -
RED LODGE NORTH
EFFECT REASSESSMENT

Subject: STPP 28-2(25)70
Corridor Study - Red Lodge North
Control No. 4375

CONCUR
PROJECT WILL HAVE
NO EFFECT ON NRHP QUALITIES
MONTANA SHPO
DATE 2-Jul-05 SIGNED [Signature]

Dear Mark:

On April 22, 2003 your office concurred with our determination that the above project would have No Adverse Effect to the St. Thomas Church (24CB1717), the Monahan House (24CB1720), the Kent Dairy Round Barn (24CB1320), and the Maryott Residence (24CB1339) as a result of the above project. Recently, however, the MDT has made some changes to the preliminary design of the project to minimize impacts to four NRHP-eligible and listed sites above.

At the St. Thomas Church, the centerline would be shifted 9-feet away from the church. The existing centerline is 82-feet from the property and the existing pavement edge is 52½ feet from the church. The proposed centerline would be located 91-feet from the property and the pavement edge 61 feet from the church. The pavement edge, therefore, would be 8½ feet further from the property than it is now. In 2003, the proposed pavement edge would have been located 2-feet closer to the church. There would be no R/W acquisition at the property and the setting would be perpetuated. The proposed project would have **No Effect** to the St. Thomas Church (24CB1717).

The existing centerline would be perpetuated at 134-feet from the Monahan House. The existing pavement edge is located at 117½ feet from the residence. Widening of the roadway would place the proposed pavement edge 4-feet closer to the property at 113½ feet. All construction activities would be confined to the existing R/W and there would be no construction permits needed at the site. The widening, moreover, would consist of the addition of paved shoulders to the roadway. The driving lanes would remain the same distance from the property and there would be no significant change in the setting of the site. None of the criteria of adverse effect can be applied to the property by this proposed project. There would, therefore, be **No Effect** to the NRHP-eligible Monahan House (24CB1720) as a result of the proposed project.

At the NRHP-listed Kent Round Dairy Barn the existing centerline would be perpetuated at the site. The existing/proposed centerline would be 126-feet from the site and the existing pavement


file: MDT/2005

edge is 115-feet from the site. Widening would place the proposed pavement edge about 4½ feet closer to the property at 110½ feet. There would be no R/W acquired from the site, but a construction permit would be needed to reconstruct a fill slope about 13-feet beyond the R/W boundary. A fill slope currently exists at the site. The reconstruction would allow for the wider roadway and addition of the paved shoulders. The reconstructed fill slope would extend to the parking lot that is currently located between the brick barn and the roadway. There would be no physical encroachment on the site and the building. There would be no significant change in the setting of the property as a fill slope would be perpetuated. The site would retain its historic appearance and none of the criteria of adverse effect applies to the project and this site in this instance. There would, therefore, be **No Effect** to the NRHP-eligible Kent Road Dairy Barn (24CB1320) because of the MDT's proposed project.

The existing centerline would be perpetuated at the Maryott Residence. The existing centerline is 131-feet from the residence while the pavement edge is 117½ feet from the residence. Widening would put the proposed pavement edge about 4-feet closer to the site at 113½ feet from the site. The widening would consist of a paved shoulder. In order to reconstruct the existing fill slope to accommodate the wider roadway, the construction limits would extend 15-feet beyond the existing R/W to within 81-feet of the project. There would be no physical encroachment on the residence or any of its outbuildings. Indeed, the setting of the property would remain largely unchanged as the construction beyond the existing/proposed R/W boundary would consist of the modification of an existing fill slope. A two-lane facility would be perpetuated and the widening in the vicinity of the site would consist of paved shoulders to improve highway safety. Other than the grassy fill slope, no other vegetation would be impacted at the site and it would appear as it does currently. The proposed project would have **No Effect** to the Maryott Residence (24CB1339).

We request your concurrence that the proposed project would have **No Effect** to the St. Thomas Church (24CB1717), the Monahan House (24CB1720), the Kent Dairy Round Barn (24CB1320), and the Maryott Residence (24CB1339). In all cases the MDT has made modifications to the plans to avoid impacting these sites as much as possible and still accomplish the goals of the proposed project.

If you have any questions, please contact me at 444-6258.


Jon Axline, Historian
Environmental Services

cc: Bruce Barrett, Billings District Administrator
Tom Martin, P.E., Consultant Design
Bonnie Steg, Resources Section



Montana Department of Transportation

2701 Prospect Avenue
PO Box 201001
Helena, MT 59620-1001

Jim Lynch, Director
Brian Schweitzer, Governor

#6

2007-09-07

Just?
100
Red Lodge - North

September 4, 2007

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SEP 21 2007

ENVIRONMENTAL

Mark Baumler, Ph.D.
State Historic Preservation Office
1410 8th Avenue
P O Box 201202
Helena, MT 59620-1202

SHPO

Subject: STPP 28-2(25)70
Red Lodge - North
Control No. 4375

CONCUR
MONTANA SHPO

DATE: 7/3/07 SIGNED

Dear Mark:

The Carnegie Library (24CB145) was inadvertently left out of the Determination of Effect we submitted to your office on June 28, 2005. The library is located at the intersection of US 212 (Broadway), Oakes Avenue, and 8th Street on the north side of Red Lodge. Based on the latest plans for that intersection, there would be some modifications made to it to facilitate traffic movement in that area. The existing alignments of all three streets would be perpetuated, but the sidewalks and curb and gutter would be changed. US 212/Broadway would remain a two-lane facility, but bulb-outs would be constructed at the intersection of 8th Street to assist pedestrians crossing the street there. The bulb-out adjacent to the library would require the acquisition of additional Right-of-Way (R/W). Also a sliver of R/W would be required at the northwest corner of the lot and east side of the property to accommodate a new sidewalk. All other construction activities would be confined to the existing R/W. The attached preliminary plan for the library indicates there would be no physical encroachment on the library and the lot upon which it is located would remain mostly intact. Based on the plan, we have determined that the proposed project would have **No Adverse Effect** to the Carnegie Library. There would be no physical change to the building and no significant change in the triangle between the three streets upon which it sits. The building would continue to function as the city library, although the triangle would be changed somewhat to facilitate both motor vehicle and pedestrian traffic there. We request your concurrence.

If you have any questions, please contact me at 444-6258.

Jon Axline, Historian
Environmental Services

Attachment

cc: Bruce Barrett, Billings District Administrator
Tom Martin, P.E., Consultant Design
Bonnie Steg, Resources Section
Heidy Bruner, P.E., Engineering Services

Appendix F

Section 4(f) Properties



Montana Fish, Wildlife & Parks

2201102 #1
F7 ✓

MAR 28 2003

1420 East Sixth Avenue
P O Box 200701
Helena, MT. 59620-0701
Phone: (406)444-3939
FAX: (406)444-3023
March 25, 2003

Sheri G. Lares
Senior Environmental Planner
Kadmas Lee & Jackson
3237 E. Broadway
P O Box 1157
Bismarck ND 58502

Dear Ms. Lares:

We received your letter and great aerals yesterday for proposed project STPP28-2(25)70. Unfortunately most of your questions will need to be answered by regional personnel in the FWP Billings office. I do not think it would be appropriate for FWP to evaluate or answer several of the items particularly item 15 when we do not have specifics on right of way required other than the areas highlighted on the aerals. FWP does own the sites identified as Horse Thief Station, Beaver Lodge, Bull Springs, and Water Birch. It does not own Rock Creek Fishing Trail, but perhaps the regional personnel will be able to shed some light on that one for you.

I have forwarded your letter, aerals and forms to that office and you should hear directly from them on this.

Sincerely,

Debby Dils
Land Section Supervisor

Cc: Harvey Nyberg, Walt Timmerman



**Montana Fish,
Wildlife & Parks**

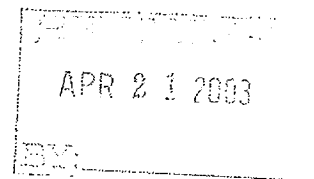
770X102
F7V

#2

Sheri Laves

K, L & J

Bismarck, ND 58502



Dear Ms. Laves,

Here are the forms you requested. Please excuse
the hand written note but I am on the road.
Please contact me if you have any questions.

With Regards

Doug Habermann

Doug Habermann
Regional Parks Manager
2300 Lake Elmo Dr
Billings MT 59105
406-247-2954

*Note: this site is
owned and operated by
MDOT.

PUBLIC RECREATIONAL FACILITIES

Facility Name: Rock Creek Fishing Trail

Facility Location: _____

1. Nearest crossroads (landmarks): Bridge crossing on
Rock Creek

Segment/Concept plan sheet number: _____

Approximate distance from existing right-of-way (metric/english): adjacent

2. Who owns the facility? Any applicable clause affecting the ownership (lease, easements, restrictions, conditions)? MDOT (rest area)

3. What is the total size of the facility (hectare/acre)? What is the approximate area devoted to recreational facilities (hectare/acre)? 6 acres

4. Type of Section 4(f) property (park, recreation, historic) and park classification: highway rest area

5. What types of activities are available at the facility?

☐ Playground Equipment

☐ Biking Trails

☐ Tennis Courts

☐ Volleyball Courts

☐ Picnic Area

☐ Shelters

☐ Basketball Courts

☐ Swimming Pool

☐ Lake

☐ Skating Rink

☐ Soccer Fields

☐ Golf Course (# of holes)

☒ Walking Trails

☐ Other:

Highway rest area

6. Description and location of existing facilities (ball diamonds, tennis courts, etc.): Rest area with bathrooms, trails

7. Description and location of planned future facilities: ?

8. Any identified facility deficiencies? ?

9. Describe access to the facility (pedestrian, vehicular): foot
10. Are recreational facilities open to the general public? What restrictions to access are there? yes - during summer season
11. Estimated number of visitors per year: ?
12. Are there other similar facilities in the vicinity? no
13. Are there unusual characteristics of the property that either reduce or enhance the value of the property? (flooding problems, terrain conditions, other features)
14. Statement of significance from the official who has jurisdiction over the entire Section 4(f) property:
15. What impact would the proposed improvements have on this facility?

Name and Title of Person Interviewed: Doug Habermann - Regional Parks Mgr

Address: 2300 Lake Elmo Dr Billings MT 59105

Telephone: 406-247-2954

Interviewed By: self Date of Interview: 4/14/03



Montana Fish, Wildlife & Parks

#3

1420 East Sixth Avenue
P O Box 200701
Helena, MT. 59620-0701
Phone: (406) 444-3939
June 17, 2005

Sheri G. Lares
Senior Environmental Engineer
Kadmas, Lee & Jackson
3237 E. Broadway
Bismarck, ND 58501

Dear Ms. Lars:

Montana Fish, Wildlife & Parks has not acquired any new property in the Highway 212 project area since your last formal inquiry in 2003. The following sites are still owned by this agency and will qualify for special treatment due to federal funding (LWCF & Dingell Johnson) if impacted by reconstruction:

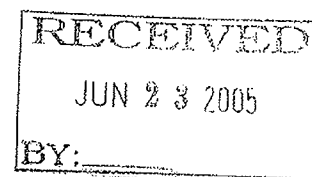
Beaver Lodge Fishing Access Site (DJ) Horse Thief Fishing Access Site (LWCF)
Bull Springs Fishing Access Site (LWCF) Water Birch Fishing Access Site (LWCF)

The FWP land records do not show any information on the Rock Creek Fish Trail although it sounds as if it should be a 4(f) property. We may have discussed this several years ago, but I did not keep any notes resolving FWP involvement in that property.

Sincerely,

Debby Dils
Land Section Supervisor

Enclosure
C: R5; Walt Timmerman



#4

Received

AUG 22 2005

PUBLIC RECREATIONAL FACILITIES
(SCHOOLS, HIGHER EDUCATION)

Kadrmas Lee & Jackson

School Name: Roberts Public Schools

School Location: 106 East Maple Street Roberts, MT 59070

1. Nearest crossroads (landmarks): North of the intersection of East Maple Street and US Highway 212

Segment/Concept plan sheet number: Between RP 214 and 217 (approximate)

Approximate distance from existing right-of-way (metric/english): Adjacent

2. Who owns the school? Any applicable clause affecting the ownership (lease, easements, restrictions, conditions)? Tax payers of District #5

3. What is the total size of the school (hectare/acre)? What is the approximate area devoted to recreational facilities (hectare/acre)? Total - 10 Rec Area 5

4. Type of Section 4(f) property (park, recreation, historic) and park classification: School playground (recreation)

5. What types of activities are available at the park?

☒ Playground Equipment

☐ Biking Trails

☐ Tennis Courts

☐ Volleyball Courts

☐ Picnic Area

☐ Shelters

☒ Basketball Courts

☐ Swimming Pool

☐ Lake

☐ Skating Rink

☐ Handball/Multi-Use

☐ Golf Course (# of holes)

☒ Baseball Fields

☒ Softball Fields

☐ Soccer Fields

☐ Walking Trails

☒ Other Football Fields / Track

6. Description and location of existing facilities (ball diamonds, tennis courts, etc.):

See Written Attached Description

7. Description and location of planned future facilities:

8. Any identified recreation deficiencies? Lack of Restrooms

9. Describe access to the school (pedestrian, vehicular): The area is on walking area with parking on the west side of School Building along Highway 212.
10. Are recreational facilities open to the general public? What restrictions to access are there? The Recreational Facilities are open to the general public all year.
11. Estimated number of visitors per year: 3000
12. Are there other similar facilities in the vicinity? No
13. Are there unusual characteristics of the property that either reduce or enhance the value of the property? (flooding problems, terrain conditions, other features) Location next to a major highway, Ditch right way b/w school and playground area
14. Statement of significance from the official who has jurisdiction over the entire Section 4(f) property: Board of Trustees for School District #5
15. What impact would the proposed improvements have on these facilities? Safety issues with closeness of Highway, Loss of Land Area for the school playground area
- Name and Title of Person Interviewed: Jeffrey Beemer Superintendent
- Address: PO Box 78 Roberts, MT 59070
- Telephone: 445-3421
- Interviewed By: _____ Date of Interview: 8/15/05

Description of the Area

The area in question is north of the school. The approximate acreage is 5 acres. Within those five acres is a football field surrounded by a five line track. On the west side of the football field/ track is the playground. The playground is fenced off from the highway with a five foot chain link fence. The Roberts Community Foundation has created an area within the playground area for the community to enjoy by adding benches, new playground equipment and lighting. The area also has a location to accommodate softball and little league baseball to the east of the playground equipment. This summer we added a basketball court west of the grandstands by pouring a new cement pad. This court lies in-between the track and the fence. We have also put in underground sprinklers to irrigate the area with the pump house located next to the crow's nest.

Future Plans

The designing of the area was set up to take place in three stages. We have currently completed stage 2 with the addition of the basketball court. Stage 3 is still in the planning stages. Early proposals include finishing the fence along the eastside of the track to secure the area from the irrigation ditch, lighting more of the area such as the new basketball court, and the addition of public restrooms. There is also talk about lighting the area inside of the track.

Concerns:

The greatest concern is the safety of our children with the highway being moved closer to the playground area. Also, there is the loss of area for our children to play. These are two areas that we feel are very important to understand and rectify before we proceed.

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OCT 12 2006
ENVIRONMENTAL



Red Lodge Area
Chamber of Commerce

#5
Chamber agreed
to give up Red Lodge
Downtown
Mayor

MASTER FILE
COPY

September 11, 2006

Mayor Roat and City Council
PO Box 9
Red Lodge, MT 59068

RE: Highway 212 design- roundabout alternative

Dear Mayor Roat and City Council:

The Red Lodge Area Chamber of Commerce is giving its strong support for the proposed roundabout design presented by the engineering firm Kadrmas Lee & Jackson and Montana Department of Transportation for the reconstruction of the intersection of State Highway 78 and U.S. 212.

Reasons for this support are as follows:

1. Goal 8 of the recently completed Downtown Red Lodge Assessment & Action Plan states – “Develop attractive entryways that create a positive first impression of Red Lodge, and clearly welcome visitors and guide them into downtown.” The chamber believes the roundabout plan for this intersection would be a major improvement to the north entrance to the town. The center section of the roundabout can be a wonderful area for art and welcoming flower gardens. The roundabout would say – this is Red Lodge and welcome to our unique and beautiful city.
2. A modern designed roundabout will accommodate all sizes of vehicles legally allowed on our state highway system.
3. Traffic engineers and traffic studies support the use of the design at similar major intersections for their safety history and ease of use. These studies and reports testify to the safe and efficient use of similar installations.
4. We support the cost effectiveness of the roundabouts over the possibility of the MDOT paying for and maintaining a full signalized intersection. We understand the proposed roundabout design is less expensive to construct in the beginning and much easier and less costly to maintain on an annual basis.
5. Red Lodge resident's takes pride in not having a “street stop light” in our town. Since this intersection most likely would be the first to meet state warrants for a signalized placement this roundabout will forestall the need for such a “street stop light” installation for many years.

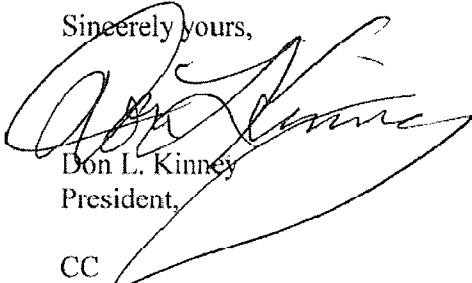
406-446-1718 • 1-888-281-0625

601 N. Broadway PO Box 988 Red Lodge, Montana 59068
www.redlodge.com • information@redlodge.com

We have heard many of the negative issues regarding roundabouts, but find them wanting for facts. This type of intersection design may be new to Montanans, but it certainly is not new to persons who have traveled in other states and other parts of the world. We, who have used them, even in Europe, have found them to be safe and effective in moving auto, bike and pedestrian travel through highly traveled intersections such as S.H. 78 and U.S. 212.

We trust you will take our comments and support MDOT in its effort to make our town a safer and more attractive place to visit, live and travel through by supporting the roundabout design alternative.

Sincerely yours,

A large, stylized handwritten signature in black ink, appearing to read 'Don L. Kinney', is written over the typed name and title.

Don L. Kinney
President,

CC
Bruce Barrett, MDOT

City of Red Lodge Mayor and City Council
1 South Platt
P.O. Box 9
Red Lodge, MT 59068

RECEIVED

OCT 12 2006

ENVIRONMENTAL

MASTER FILE
COPY

Re: Section 4(f) Regulations: Significance of Grassy Area Adjacent to Visitors Center
MDT Project: Red Lodge North
Project Number: STPP 28-2(25)70
Control Number: 4375

Dear Mayor and City Council:

The Montana Department of Transportation (MDT) is evaluating potential environmental impacts that may be associated with the above project. With this letter we are requesting your assistance in providing public land information on the grassy area north of and adjacent to the Red Lodge Visitors Center and Chamber of Commerce (from this point forward, referred to as "the site"). We need your information to determine if a certain federal regulation might be applicable to this site.

The federal regulation we are specifically interested in is found at 49 USC 303 Section 4(f) and 23 CFR 771.135 and is referred to as the Section 4(f) Regulation. Potentially applicable portions of the Section 4(f) Regulation state that the Federal Highway Administration (FHWA) can approve projects requiring the use of publicly owned land of a public park or recreation area only if there is no feasible and prudent alternative to such use and only if the project includes all possible planning to minimize harm.

The project under consideration involves reconstructing US Highway 212 from 8th Street in Red Lodge to north of Boyd. As you know, in the immediate vicinity of the Red Lodge Visitors Center/Chamber of Commerce, the project includes two improvement options for the MT Highway 78/US Highway 212 intersection: a roundabout and a signalized intersection. In general, a conscious effort was made to keep construction limits of this project within the existing right of way as much as possible. However, both build options under consideration at the MT 78/US 212 intersection would require additional right of way from this site.

Before the project can proceed, it must be determined if the 4(f) Regulation is applicable to that site. MDT cannot determine applicability of this regulation. "Officials having jurisdiction" must determine applicability of the 4(f) Regulation by evaluating the major purposes and functions of the site and the significance of the site. For purposes of applying this regulation, the City of Red Lodge should consider four criteria in your evaluation of the site. Those criteria are outlined below.

First, the site must be publicly owned. Our records indicate this site is publicly owned and therefore, the first criterion is met. Please inform us if our understanding is incorrect.

Second, the site must be open to the public. Our understanding is that the area is open to the public at all times. As a result, the second criterion is met. Please inform us if our understanding is incorrect.

Third, one of the major purposes and functions of the site must be a park or recreation area. Please note that incidental, secondary, occasional or dispersed recreational activities do not constitute a major purpose.¹ Our understanding is that the site is used for incidental, secondary, occasional or dispersed recreational activities. Please inform us if our understanding is incorrect.

¹ US Department of Transportation Federal Highway Administration, Office of Planning, Environment and Realty Project Development and Environmental Review, *FHWA Section 4(f) Policy Paper*, page 11, March 1, 2005.

If the third criterion is met, then the fourth criterion must be considered. For the fourth criterion to be met, the site must be a "significant property." Significance means that in comparing the availability and function of this site with the park and recreation objectives of the community or authority, this site plays an important role in meeting those objectives. Management plans or other official forms of documentation regarding the land, if available and up-to-date, are important in this determination.² Our understanding is that the potentially impacted portions of this site do not play an important role in meeting community overall recreation objectives. Please inform us if we are incorrect and the City of Red Lodge determines that this site is a significant property.

Based on our preliminary review of the impacts to the site, it appears that this site may not meet the criteria for Section 4(f) applicability. However, the City of Red Lodge, as the officials with jurisdiction over the site, must make that applicability determination.

If you determine that one of the primary purposes and functions of the site is not recreation and/or the site is not significant, the Section 4(f) regulations would not apply. Please sign below if you concur. If you do not concur, please respond with a letter.

If you have any questions or concerns, please phone me at 406.444.7203 or Bruce Barrett at 406.657.0210. We will be pleased to assist you. Thank you for your assistance in this matter.

Sincerely,



Heidi Bruner
Environmental Services Bureau Project Development Engineer

The City of Red Lodge concurs that the grassy area adjacent to the Red Lodge Visitors Center/Chamber of Commerce is not "significant" to the City's overall recreation system.



Name

10-9-06
Date



Title

cc: Jean A. Riley, PE
Bruce Barrett
Gabe Priebe, PE
Tom Martin, PE
Jim Mullins
Heidi Bruner
Alan Woodmansey, PE
File

MDT Environmental Service Bureau Chief
MDT Billings District Administrator
MDT Consultant Design
MDT Consultant Design
MDT Right of Way
MDT Environmental Services
FHWA

S:\PROJECTS\BILLINGS\4000-4999\4375\4375EN4\CSF001.DOC

² Ibidem, page 12.

#7

Red Lodge North Record of Telephone Conversation

Date: 07/13/07 10:15 a.m.

Project Number: 2201102

Recorded By: Becky Rude

Phase Number:

◆.....◆
Talked With: Hugh Huntley

Representing: Magic City Fly Fishers

Address:

City: State: Zip:

Phone Number: 406-652-2261

Email: hughmaryhunt@yahoo.com
◆.....◆

Subject of Conversation: Rock Creek Fishing Trail

Items Discussed:

Mr. Huntley informed me that the Rock Creek Fishing Trail is open to the public and as far as he knows it is publicly owned. They have been maintaining it about twice a year for the past 10 to 15 years. The only involvement Montana Fish, Wildlife & Parks had was that they put up the sign near the trail. The trail runs approximately 100 yards from the rest area parking lot to the Creek.
◆.....◆

Distribution: ☐ KL&J (Names)
☐ (Names)

Appendix G

Section 4(f) De Minimis Evaluations



U.S. Department
of Transportation
**Federal Highway
Administration**

Montana Division

January 8, 2008

585 Shepard Way
Helena, MT 59601

Mark Baumler
State Historic Preservation Office
PO Box 201202
Helena, MT 59620-1202

In Reply Refer To:
HDA-MT

Subject: ***De minimis Finding***
Project Name: Corridor Study -- Red Lodge North
Project Number: STPP 28-2(25)70
Control Number: 4375

Dear Mr. Baumler:

By way of this letter and attachments, the Federal Highway Administration (FHWA) is requesting written concurrence from the Montana State Historic Preservation Office (SHPO) that the determinations of effect as listed below are still applicable:

Boyd Mercantile (24CB1831) No Effect.

The Preferred Alternative would avoid impacts to the Boyd Mercantile and minimize right-of-way impacts to this property. At this location, highway-related storm water drainage would be diverted to the west side of the roadway, eliminating the need for a full ditch on the east side of the roadway. In addition, a reverse curb would be used to delineate the Boyd Country Store parking lot from the roadway which would improve the safety and functionality of the parking lot. A temporary construction easement would be required at this location to facilitate construction. Also, MDT has existing easements for the existing roadway that would be incorporated into permanent right-of-way.

Carnegie Library (24CB145) No Adverse Effect.

The Preferred Alternative would avoid impacts to the Carnegie Library structure and minimize/mitigate impacts to the Carnegie Library property, as described below:

- The Carnegie Library building would be avoided with the use of a bulb-out at the 8th Street / US Highway 212 intersection.
- A sidewalk would be added on the east and west sides of US Highway 212 from 8th Street to the north; this would improve pedestrian access to the Library.
- Additional public parking spaces would be added on the west side of the Library along Oakes Avenue, which would improve vehicular access to the Library.
- The existing Mountain Ash tree on the southeast corner of the Library property would be avoided; however, the sign may need to be relocated.

- MDT will work with Carnegie Library representatives during project design to determine an appropriate treatment for the triangular area on the north end of the property (such as seeding with grass seed).

Kent Dairy Round Barn (24CB1320) No Adverse Effect.

The Preferred Alternative would avoid impacts to the Kent Dairy Round Barn structure and minimize impacts to the property. Right-of-way impacts would be minimized with the use of a buried culvert rather than an open ditch at this location.

Rocky Fork Branch of the Northern Pacific Railroad (24CB1283) No Adverse Effect

The Preferred Alternative would impact the Rocky Fork Branch of the Northern Pacific Railroad in approximately eight locations. Impacts at four of these locations would be due to relocation of irrigation ditches outside of the proposed right-of-way per standard MDT procedures. At two locations, the impact would be a result of the construction of the highway ditch. One location would be impacted by the addition of a northbound passing lane. Lastly, one location would be impacted by installation of a new culvert under the railroad bed to improve storm water drainage for the community of Roberts. The site consists of approximately 22 acres, of which approximately 3.2 acres would be disturbed by the Preferred Alternative.

This site has already been significantly impacted. The bridges, rails, ties, ballast, and associated features have been long removed from the line. Also, segments of the line have been converted into local access roads, residential developments have encroached on the line, and lack of maintenance has led to deterioration of the line's integrity. The minor impacts from the Preferred Alternative would not substantially alter the railroad line's historical integrity, as it has already been significantly impacted.

In addition to Section 106 of the National Historic Preservation Act (NHPA), FHWA must comply with the provisions of Section 4(f) of the 1966 Department of Transportation Act. Historically, Section 4(f) has required that prior to approval of any federally-funded highway project resulting in the "use" of listed or eligible historic properties under the NHPA; the FHWA must perform an avoidance analysis to determine whether there is a "feasible and prudent" alternative that would avoid the Section 4(f) resource.

In August of 2005, Section 138 of title 23, USC was amended under the Safe, Accountable, Flexible, and Efficient Transportation Act: A Legacy for Users (SAFETEA-LU). Section 6009 of SAFETEA-LU provided new legislative authority to address programs and projects with minor or 'de minimis' impacts on a Section 4(f) resource.

More specifically, Section 6009(b) (2) of SAFETEA-LU states:

(2) HISTORIC SITES.--With respect to historic sites, the Secretary may make a finding of *de minimis impact* only if--

(A) the Secretary has determined, in accordance with the consultation process required under section 106 of the National Historic Preservation Act (16 U.S.C. 470f), that--

(i) the transportation program or project will have no adverse effect on the historic site; or

(ii) there will be no historic properties affected by the transportation program or project;

(B) the finding of the Secretary has received written concurrence from the applicable State historic preservation officer or tribal historic preservation officer (and from the Advisory Council on Historic Preservation if the Council is participating in the consultation process); and

(C) the finding of the Secretary has been developed in consultation with parties consulting as part of the process referred to in subparagraph (A).

This new provision of Section 4(f) is the basis of this letter, and of the FHWA's determination of *de minimis* impacts.

***De Minimis* Determination**

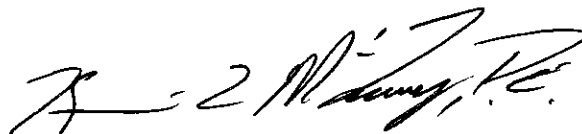
The findings of "no effect" and "no adverse effect" reflect a conclusion that the uses identified in the attached exhibits will not "alter, directly or indirectly, any of the characteristics of [the] historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association."

If you concur in the "no effect" and "no adverse effect" determinations, FHWA intends to make a finding that impacts to historic resources that would result from implementation of the subject project would be *de minimis* for purposes of Section 4(f), as recently amended by Congress.

Request for Concurrence

The FHWA requests the written concurrence of the Montana SHPO in the above-described findings of "no effect" and "no adverse effect" on historic resources from the subject project. This written concurrence will be evidence that the concurrence and consultation requirements of Section 6009 of SAFETEA-LU, as they will be codified at 23 U.S.C. § 138(b) (2) (B) & (C), and 49 U.S.C. § 303 (d) (2) (B) and (C) are satisfied. Concurrence can be provided either by signing and dating this letter or by separate letter from the Montana SHPO to the Federal Highway Administration, 585 Shepard Way, Helena, MT 59601.

Sincerely,

A handwritten signature in black ink, appearing to read "K. L. McLaury, P.E.", written in a cursive style.

Kevin L. McLaury, P.E.
Division Administrator

Attachments

cc: Gabe Priebe - MDT, Engineering Project Manager
Carl James - FHWA, Transportation Specialist

File: STPP 28-2(25)70 aw/lw

CONCUR
MONTANA SHPO

DATE

1/15/2009

SIGNED

Mark F. Priebe, SHPO

2003040801



Montana Department of Transportation

RECEIVED

01 Prospect Avenue
PO Box 201001
Helena MT 59620-1001

David A. Gall, Director
Judy Martz, Governor

April 4, 2003

APR 2 4 2003

ENVIRONMENTAL

Mark Baumler, Ph.D.
State Historic Preservation Office
1410 8th Avenue
P O Box 201202
Helena, MT 59620-1202

RECEIVED
APR 08 2003
BY: _____

Joseph
MDT
Corridor Study
Red Lodge!

Subject: STPP 28-2(25)70
Corridor Study - Red Lodge North
Control No. 4375

Enclosed is the Determination of Effect for the above project in Carbon County. We have determined that the proposed project would have No Effect to Finley House (24CB1822), the Richardson Bungalow (24CB1287), the Montana Dakota Grain Company Elevator (24CB1830), the Dairy Delite Drive-In (24CB1833), the O'Shea House (24CB1705), the Silakka House (24CB1712), the Boyd Mercantile (24CB1831), - and the Maryott Ranch/Carbon County Dairy (24CB1336). There would be No Adverse Effect to the St. Thomas Church (24CB1717), the Monahan House (24CB1720), the Kent Dairy Round Barn (24CB1320), and the Maryott Residence (24CB1339). There would be No Effect to the Red Lodge Commercial Historic District (24CB145) and the Hi Bug Historic District (24CB1030). We request your concurrence.

If you have any questions, please contact me at 444-6258.

Jon Axline
Jon Axline, Historian
Environmental Services

Enclosure

CONCUR
MONTANA SHPO
DATE 22 Apr 03 SIGNED: *[Signature]*

cc: Bruce Barrett, Billings District Administrator
Carl Peil, P.E., Preconstruction Bureau
Gordon Stockstad, Resources Section

Received

JUN - 6 2003

Kadrmass Lee & Jackson

file: MDT/2003



Montana Department of Transportation

2701 Prospect Avenue
PO Box 201001
Helena, MT 59620-1001

Jim Lynch, Director
Brian Schweitzer, Governor

September 4, 2007

Mark Baumler, Ph.D.
State Historic Preservation Office
1410 8th Avenue
P O Box 201202
Helena, MT 59620-1202

RECEIVED

SEP 21 2007

ENVIRONMENTAL

Subject: STPP 28-2(25)70
Red Lodge - North
Control No. 4375

CONCUR
MONTANA SHPO

DATE 7/24/07 SIGNED

Dear Mark:

The Carnegie Library (24CB145) was inadvertently left out of the Determination of Effect we submitted to your office on June 28, 2005. The library is located at the intersection of US 212 (Broadway), Oakes Avenue, and 8th Street on the north side of Red Lodge. Based on the latest plans for that intersection, there would be some modifications made to it to facilitate traffic movement in that area. The existing alignments of all three streets would be perpetuated, but the sidewalks and curb and gutter would be changed. US 212/Broadway would remain a two-lane facility, but bulb-outs would be constructed at the intersection of 8th Street to assist pedestrians crossing the street there. The bulb-out adjacent to the library would require the acquisition of additional Right-of-Way (R/W). Also a sliver of R/W would be required at the northwest corner of the lot and east side of the property to accommodate a new sidewalk. All other construction activities would be confined to the existing R/W. The attached preliminary plan for the library indicates there would be no physical encroachment on the library and the lot upon which it is located would remain mostly intact. Based on the plan, we have determined that the proposed project would have **No Adverse Effect** to the Carnegie Library. There would be no physical change to the building and no significant change in the triangle between the three streets upon which it sits. The building would continue to function as the city library, although the triangle would be changed somewhat to facilitate both motor vehicle and pedestrian traffic there. We request your concurrence.

If you have any questions, please contact me at 444-6258.

Jon Axline, Historian
Environmental Services

Attachment

cc: Bruce Barrett, Billings District Administrator
Tom Martin, P.E., Consultant Design
Bonnie Steg, Resources Section
Heidy Bruner, P.E., Engineering Services

#2

2003091103



Montana Department of Transportation

David A. Galt, Director
Judy Martz, Governor

2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001

MASTER FILE
COPY

September 10, 2003

Mark Baumler, Ph.D.
State Historic Preservation Office
1410 8th Avenue
P O Box 201202
Helena, MT 59620-1202

Josef
MDT
RE-LODGE NORTH:
EFFECT TO 24CB1283
A PACIFIC RAILWAY

BY: _____

Subject: STPP 28-2(25)70
Corridor Study - Red Lodge North
Control No. 4375

CONCUR
MONTANA SHPO

DATE: 25 Sep 03 SIGNED: *[Signature]*

On April 4, 2003, we submitted a Determination of Effect to your office describing impacts to twelve historic sites located in the Area of Potential Effect (APE) for the above project in Carbon County. You concurred with our determination on April 22, 2003. However, we inadvertently omitted assessing effects to the Rocky Fork Branch of the Northern Pacific Railway (24CB1283).

The Rocky Fork Branch was completed in 1889 and functioned primarily as a coal and agricultural carrier between Red Lodge and the rail yards/junction at Laurel. In 1983, the railroad abandoned the line with sections of the grade returned to agricultural use by adjacent landowners, converted into a roadbed or allowed to deteriorate. The Rocky Fork Branch was determined eligible for the National Register of Historic Places under Criterion A in 1992.

What remains of the abandoned grade parallels much of the above 20+ mile project area. While most of it lies outside the proposed R/W and construction limits boundary, approximately 2.8-miles of non-continuous abandoned railroad grade lies within the project area and may be impacted by the proposed project. The grade would be impacted by realignment and widening of the existing roadway.

We have determined, however, that the proposed project would have No Adverse Effect to the NRHP-eligible Rocky Fork Branch Line (24CB1283). The line was abandoned in 1983 with the segment north of Rockvale to Laurel still active and maintained by the Burlington Northern-Santa Fe Railroad. The 32-mile segment south of Rockvale, however, has been significantly impacted since 1983. The bridges, rails, ties, ballast and associated features (i.e. spikes, tie plates, signal masts, etc.) have been long removed from the line. However, depots and grain elevators still exist in Red Lodge, Fox, and Roberts. Segments of the line have been converted into local access roads or were turned over to adjacent landowners who either allowed it to deteriorate or otherwise obliterated the line. Other segments have been abandoned and are deteriorating from lack of maintenance. There has also been considerable residential development within the corridor, which has further impacted the integrity of the railroad line.

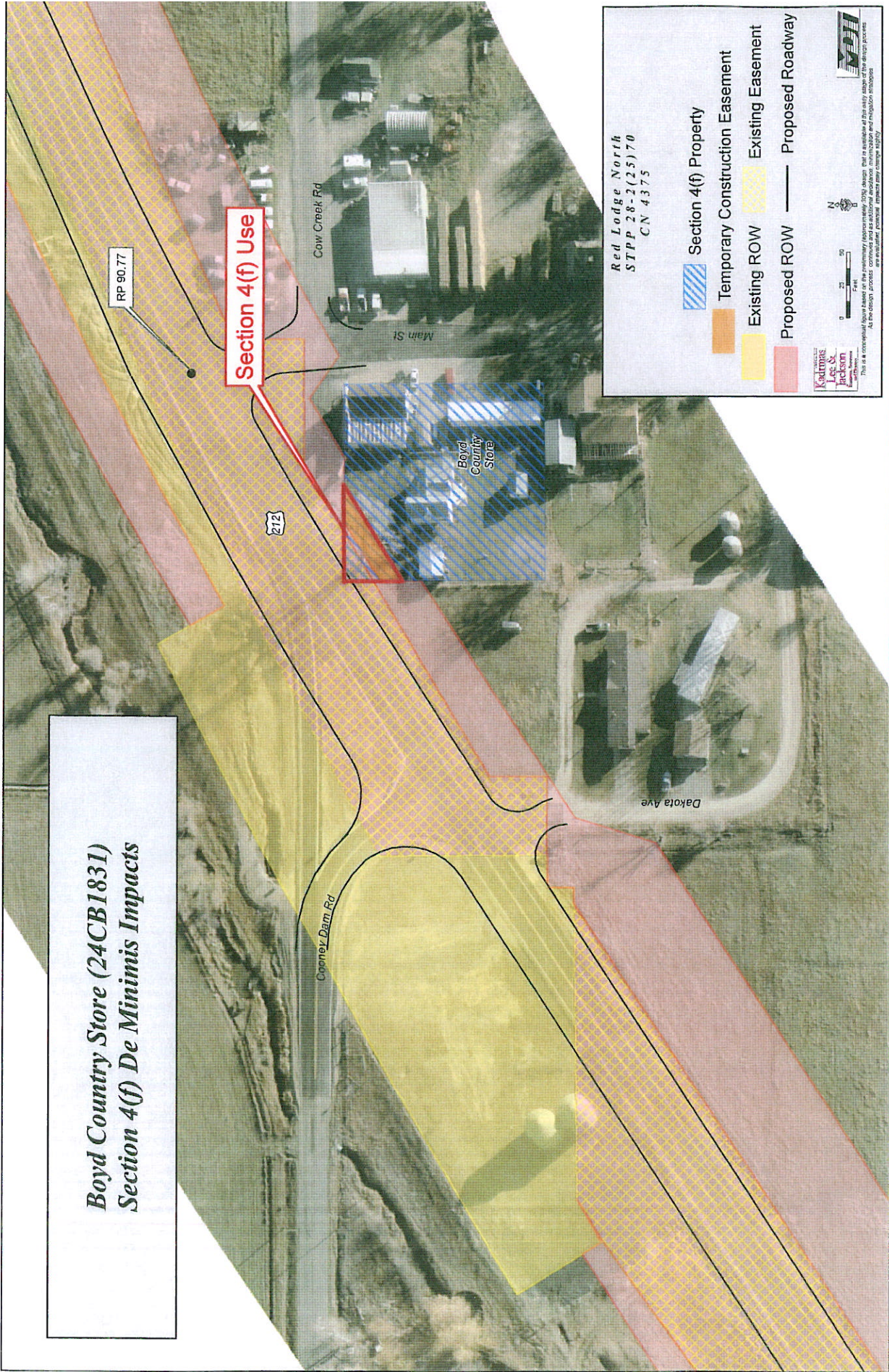
Based on the existing condition of the line, the proposed project would not significantly alter its appearance, integrity, or ability to convey its historic significance to the development of Rock Creek valley. The most intact segments south of Roberts are located outside the proposed R/W boundary and are not included within the construction limits of the project. Those segments are currently being used as local access roads and would be perpetuated. There are no railroad-related structures that would be impacted by the project. The setting would not be adversely effected in that residential and commercial development all along the line in the project area over the last 20 years has already had a significant impact to the setting of the area. Because of the Rocky Fork branch line's significance to the development of Red Lodge and the Rock Creek valley, the MDT would install an interpretive marker adjacent to U.S. 212 near where a relatively intact segment of the line remains. We request your concurrence that the proposed project would have No Adverse Effect to the Rocky Fork Branch of the Northern Pacific Railroad (24CB1283).

If you have any questions, please contact me at 444-6258.

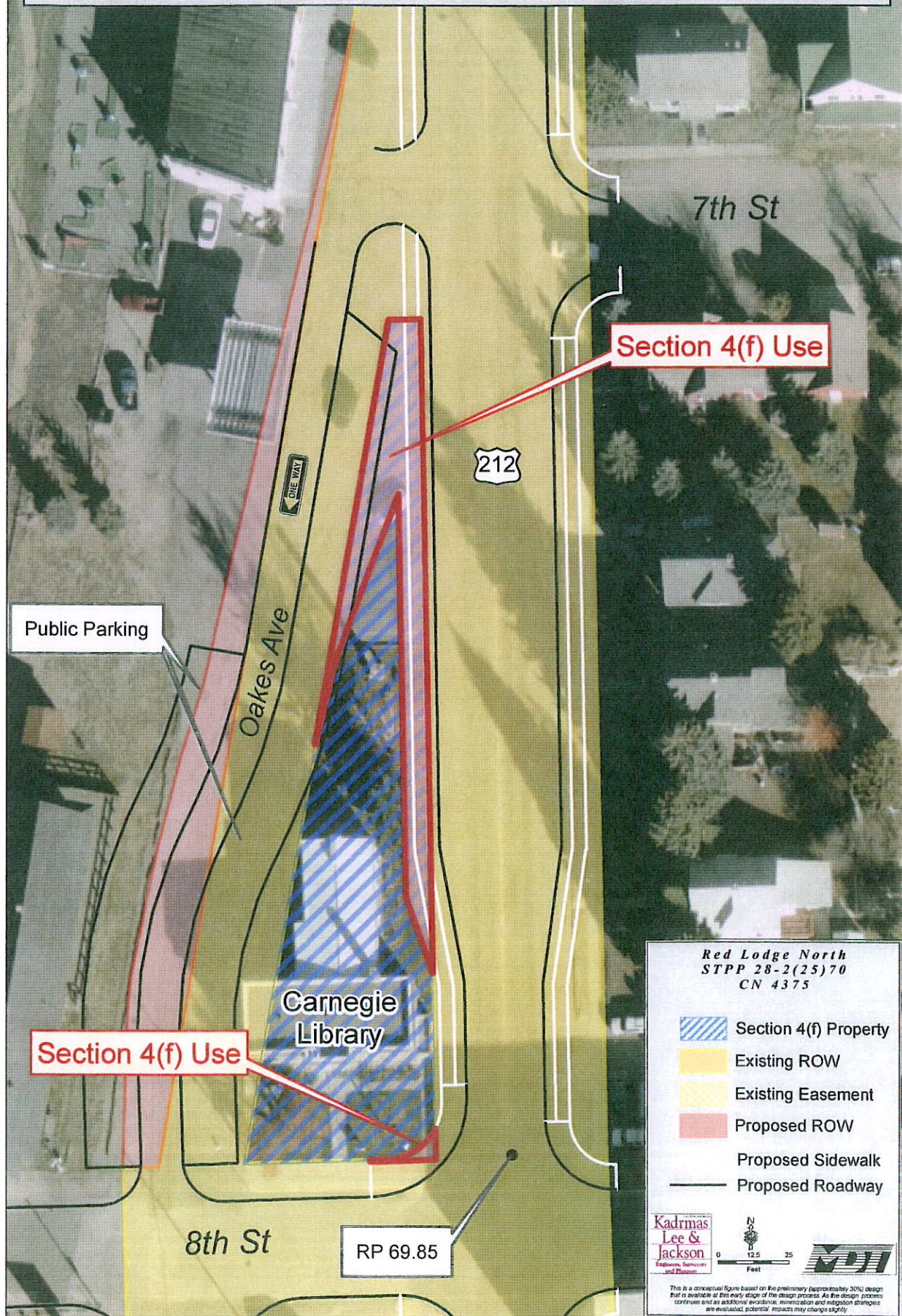

Jon Axline, Historian
Environmental Services

cc: Bruce Barrett, Billings District Administrator
Carl Peil, P.E., Preconstruction Bureau
Bonnie Sieg, Resources Section

**Boyd Country Store (24CB1831)
Section 4(f) De Minimis Impacts**








Carnegie Library (24CB145)
Section 4(f) De Minimis Impacts



Kent Dairy Round Barn (24CB1320)
Section 4(f) De Minimis Impacts



Red Lodge North
STPP 28-2(25)70
CN 4375

-  Section 4(f) Property
-  Existing ROW
-  Existing Easement
-  Proposed ROW
-  Proposed Roadway

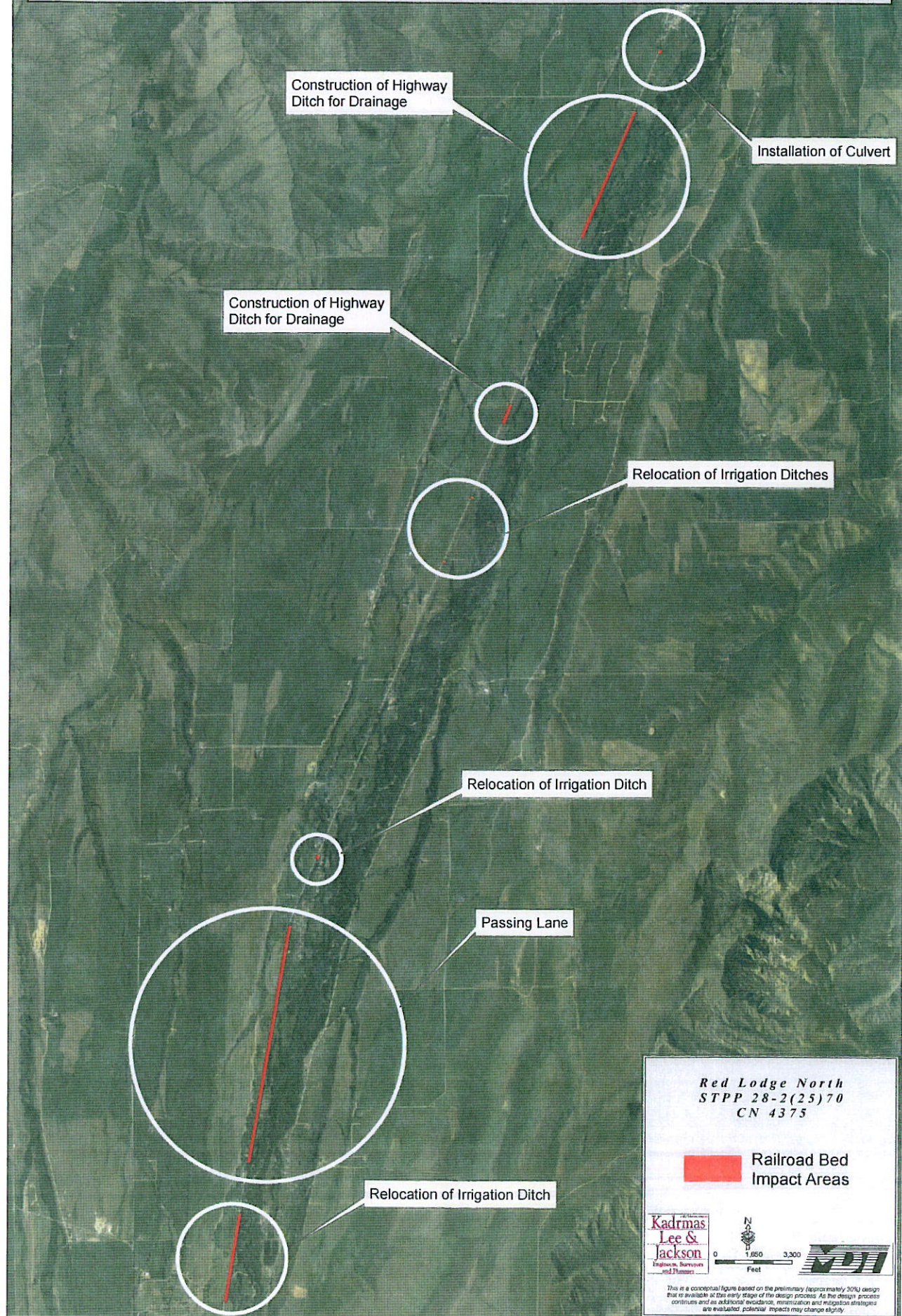
Kadmas
Lee &
Jackson
Engineers, Surveyors
and Planners



This is a conceptual figure based on the preliminary (approximately 30%) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization and mitigation strategies are evaluated, potential impacts may change slightly.

Rocky Fork Branch of the Northern Pacific Railroad (24CB1283)

Section 4(f) De Minimis Impacts





U.S. Department
of Transportation

**Federal Highway
Administration**

Montana Division

March 21, 2008

585 Shepard Way
Helena, MT 59601

Mark Baumler
State Historic Preservation Office
1410 8th Avenue
PO Box 201202
Helena, MT 59620-1202

Subject: *De minimis Finding*

Project Name: Corridor Study – Red Lodge North
Project Number: STPP 28-2(25)70
Control Number: 4375

Dear Mr. Baumler:

By way of this letter, the Federal Highway Administration (FHWA) is requesting written concurrence from the Montana State Historic Preservation Office (SHPO) that the concurrence dated June 10, 2005, is still applicable. The determinations were for the following Historic Irrigation Ditches:

Brandt Ditch 24CB1722 No Effect
Rule-Thompson Ditch 24CB1723 No Adverse Effect
Duncan-Aiken Ditch 24CB1724 No Effect
Hunts Ditch 24CB1726 No Adverse Effect
Highline Ditch 24CB1727 No Adverse Effect
Rooney Ditch 24CB1728 No Adverse Effect
Drakes Ditch 24CB1729 No Adverse Effect
Ward Ditch 24CB1730 No Adverse Effect
Carbonado Ditch 24CB1731 No Effect
Hoyle Ditch 24CB1761 No Adverse Effect

The preferred alternative would impact 10 historic irrigation ditches along the project corridor. These irrigation ditches fall within proposed right-of-way and would require relocation outside of the right-of-way, per MDT's standard practice. Within the community of Roberts, the preferred alternative would require approximately 55 feet of right-of-way (including existing right-of-way and easements) along Brandt Ditch; therefore, requiring relocation of the ditch. Also within Roberts, the realignment of Cooney Dam Road with US Highway 212 would require the relocation of the Rule-Thompson Ditch outside of the road's proposed right-of-way. Within the rural segments of the project corridor, in this case between Roberts and Boyd, a standard 80-foot right-of-way is generally proposed. The remaining eight historic irrigation ditches fall within this 80-foot right-of-way and would require the relocation of the ditches outside of the proposed right-of-way.

**MOVING THE
AMERICAN
ECONOMY**

20080321

APP: 1

Consultant Design		
Action	Info	Initial
	Date 4/15/08	
	Routing	
	Bureau Chief	
	Consultant plans Eng	
	Design Supervisor	
	CTEP Engineer	
	PLEASE	✓
✓	EMAILED TO LTS 4/15/08 (M. WAMBOLDT) (C. BRETT)	✓
	SHPO	
✓	File PROJECT	

In Reply Refer To:
HDA-MT

• Josef
• FHWA
• RED LODGE
NORTH 4F
DE MINIMIS
FINDING

In addition to Section 106 of the National Historic Preservation Act (NHPA), FHWA must comply with the provisions of Section 4(f) of the 1966 Department of Transportation Act. Historically, Section 4(f) has required that prior to approval of any federally-funded highway project resulting in the “use” of listed or eligible historic properties under the NHPA; the FHWA must perform an avoidance analysis to determine whether there is a “feasible and prudent” alternative that would avoid the Section 4(f) resource.

In August of 2005, Section 138 of title 23, USC was amended under the Safe, Accountable, Flexible, and Efficient Transportation Act: A Legacy for Users (SAFETEA-LU). Section 6009 of SAFETEA-LU provided new legislative authority to address programs and projects with minor or ‘*de minimis*’ impacts on a Section 4(f) resource.

More specifically, Section 6009(b) (2) of SAFETEA-LU states:

(2) HISTORIC SITES.--With respect to historic sites, the Secretary may make a finding of *de minimis impact* only if--

(A) the Secretary has determined, in accordance with the consultation process required under section 106 of the National Historic Preservation Act (16 U.S.C. 470f), that--

(i) the transportation program or project will have no adverse effect on the historic site; or

(ii) there will be no historic properties affected by the transportation program or project;

(B) the finding of the Secretary has received written concurrence from the applicable State historic preservation officer or tribal historic preservation officer (and from the Advisory Council on Historic Preservation if the Council is participating in the consultation process); and

(C) the finding of the Secretary has been developed in consultation with parties consulting as part of the process referred to in subparagraph (A).

This new provision of Section 4(f) is the basis of this letter, and of the FHWA’s determination of *de minimis* impacts.

***De Minimis* Determination**

The findings of “no effect” or “no adverse effect” reflect a conclusion that the uses identified in the attached exhibits will not “alter, directly or indirectly, any of the characteristics of [the] historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association.”

If you concur in the “no effect” or “no adverse effect” determinations, FHWA intends to make a finding that impacts to historic resources that would result from implementation of the subject project would be *de minimis* for purposes of Section 4(f), as recently amended by Congress.

Request for Concurrence

The FHWA requests the written concurrence of the Montana SHPO in the above-described findings of "no effect" or "no adverse effect" on historic resources from the subject project. This written concurrence will be evidence that the concurrence and consultation requirements of Section 6009 of SAFETEA-LU, as they will be codified at 23 U.S.C. § 138(b) (2) (B) & (C), and 49 U.S.C. § 303 (d) (2) (B) and (C) are satisfied. Concurrence can be provided either by signing and dating this letter or by separate letter from the Montana SHPO to the Federal Highway Administration, 585 Shepard Way, Helena, MT 59601.

Sincerely,



Kevin L. McLaury, P.E.
Division Administrator

Attachments

cc: Gabe Priebe, P.E., MDT Consultant Design Project Engineer
Alan Woodmansey, P.E., FHWA, Operations Engineer
Carl James, P.E., FHWA, Transportation Specialist

File: STPP 28-2(25)70 aw/lw

CONCUR
MONTANA SHPO

DATE 9 Apr 2008 SIGNED





RECEIVED

JUN 14 2005

ENVIRONMENTAL

May 19, 2005

Montana Department of Transportation

2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001

2005052001

Jim Lynch, Director

Brian Schweitzer, Governor

Mark Baumler, Ph.D.
State Historic Preservation Office
1410 8th Avenue
P O Box 201202
Helena, MT 59620-1202

Subject: STPP 28-2(25)70
Red Lodge - North Corridor Study
Control No. 4375

CONCUR

MONTANA SHPO

Josef
MDT
Red Lodge -
N Corridor Study

Dear Mark:

DATE 16 JUN 05 SIGNED *Jim Lynch*

The MDT has programmed a project to reconstruct 19.81 miles of U.S. Highway 212 from the north side of Red Lodge to the community of Boyd. On September 10, 2003, your office concurred with our Determination of Effect regarding the historic properties located along the road corridor. There are eleven privately-owned irrigation ditches located along that segment of the highway. They are: the Brandt Ditch (24CB1722), Rule-Thompson Ditch (24CB1723), Duncan-Aiken Ditch (24CB1724), Bernhardt Ditch (24CB1725), Hunts Ditch (24CB1726), Highline Ditch (24CB1727), Rooney Ditch (24CB1728), Drakes Ditch (24CB1729), Ward Ditch (24CB1730), Carbonado Ditch (24CB1731), and the Hoyle Ditch (24CB1761). Site forms for these ditches are included in Laurie Travis, "Red Lodge North, Highway Improvements: A Cultural Resource Inventory from Roberts to Boyd, Carbon County, Montana," (Metcalf Archaeological Consultants, October, 2002). Based on their contribution to the agricultural development of the lower Rock Creek Valley, the ditches are eligible for the National Register of Historic Places under Criterion A.

U.S. Highway 212 was originally constructed in 1936 and 1939 to provide a connection between U.S. 10, Red Lodge, and the recently completed Beartooth Highway. The roadway was last reconstructed in 1985 and all the culverts that would be impacted as part of this job were installed at that time. The Reinforced Concrete Pipe culverts proposed for this project are of the same dimensions as those installed in 1985. The culverts are, moreover, part of the roadway and not part of the ditch system. The following is a list of the ditches, the proposed impacts to them, and the effects of the proposed project on them.

Brandt Ditch (24CB1722). It is the intent of the project to replace the existing corrugated steel pipe (CSP) with a reinforced concrete pipe (RCP). The ditch is approximately two miles in length and would not be rechanneled where it crosses under U.S. Highway 212. The existing and historic function of the ditch would be perpetuated as would its alignment where it crosses under the roadway. None of the criteria of Adverse Effect could be applied to this ditch as a result of the project. The proposed project would, therefore, have No Effect to the Brandt Ditch.

file: MDT/2005

Environmental Services Unit
Phone: (406) 444-7228
Fax: (406) 444-7245

An Equal Opportunity Employer

Web Page: www.mdt.state.mt.us
Road Report: (800) 226-7623
TTY: (800) 336-7692

The Rule-Thompson Ditch (24CB1723) is about 2½ miles in length and consists of a crude field irrigation ditch. The MDT intends to replace the existing RCP crossing under the roadway with a new RCP as part of the project. In addition, about 180-feet of ditch would be rechanneled to accommodate a new crossing under the roadway. This constitutes 1.3% of the entire length of the ditch. Evidence suggests that the ditch was originally rechanneled in 1936 to accommodate the roadway. There would not be a significant change in the setting of the ditch as a result of the project and its existing and historic function would be perpetuated. The proposed width of the rechanneled portion of the ditch would match the existing width of the facility. There would be No Adverse Effect to the Rule-Thompson Ditch as a result of the project.

The Duncan-Aiken Ditch (24CB1724) is approximately 3 miles in length and also consists of a small field ditch. The MDT intends to replace the existing CSP with a new RCP at the point where the ditch crosses under U.S. Highway 212. The ditch would not be rechanneled to accommodate the pipe. The setting of the site would be retained and the historic function of the ditch perpetuated. There would be No Effect to the Duncan-Aiken Ditch as a result of the proposed project.

The Bernhardt Ditch (24CB1725) is about 1½ miles in length and is similar in design, appearance, and usage. According to the preliminary plan sheets, the existing culvert would not be replaced as part of the proposed project. There would be no change in the alignment of the ditch and no alteration of its current dimensions or use as a field ditch. There would, therefore, be No Effect to the Bernhardt Ditch as a result of the project.

The Hunts Ditch (24CB1726) crosses under U.S. Highway 212 at two points in Section 29, T5S, R21E. The ditch has a total length of about two miles and is similar in appearance to the Bernhardt Ditch. It is the intent of the MDT to replace the existing CSP's with RCP's. About 351-feet of ditch would also be rechanneled to accommodate the crossings. This constitutes about 3.3% of the total length of the ditch. There would not, however, be any change in the function of the facility and it would continue to provide water to adjacent farmlands near the roadway. The ditch, moreover, was rechanneled in 1936 when the roadway was originally constructed. The setting of the site would remain intact as would the majority of the alignment and configuration of the ditch. The MDT project would have No Adverse Effect to the Hunts Ditch.

The Highline Ditch (24CB1727) roughly parallels U.S. Highway 212 for 10± miles in Section 21, T5S, R21E. It is the intent of the MDT to replace the existing RCP with a new RCP. The project would also include the rechanneling of 148-feet of the 52,800± foot ditch. This would constitute about 24% of the entire ditch system. There would be no change in the historic function of the ditch and it would continue to irrigate farm fields in central Carbon County. The dimensions of the rechanneled portion of the ditch would closely match the existing width and depth of the facility. There would be no significant change in the setting of the facility. The proposed MDT project would, therefore, have No Adverse Effect to the Highline Ditch.

The Rooney Ditch (24CB1728) is 3± miles in length and carries water to agricultural property in the general vicinity of U.S. Highway 212. The MDT intends to replace the

existing RCP with a new RCP. Along with the RCP, it is the intent of the project to rechannel about 754-feet of the ditch to better accommodate the new pipe. There would be no change in the historic function of the ditch, which was originally rechanneled in 1936 because of highway construction. The dimensions of the rechanneled portion of the ditch would closely match the segments located outside the project area. The setting of the property would also remain largely intact. The proposed project would have No Adverse Effect to the Rooney Ditch.

Drakes Ditch (24CB1729) is a small field ditch that is about two miles in length and carries water to one or two users. It is the intent of the MDT to replace the existing RCP with a new RCP and rechannel about 207-feet of the ditch to accommodate the new pipe and improve its hydraulics. This would constitute 1.9% of the entire length of the system. The ditch would continue to function in its historic capacity as a ditch and there would be no change to most of the facility. The dimensions of the rechanneled portions of the ditch would closely match the unchanged segment of the facility. There would be no change in the setting of the ditch. There would be No Adverse Effect to the Drakes Ditch.

The Ward Ditch (24CB1730) is approximately five miles in length and irrigates farmland for one or two users in Section 2, TSS, R21E and Section 35, T4S, R21E. The MDT intends to replace the existing RCP with a new RCP that would better accommodate the hydraulics of the site. About 541-feet or 2% of the ditch would be rechanneled in conjunction with the installation of the new pipe. There would be no change in the historic function or capacity of the ditch as a result of the project. The setting of the historic property would also remain largely intact with most of the ditch located outside the APE of the project. The setting would also remain intact. The proposed MDT project would have No Adverse Effect to the Ward Ditch.

The Carbonado Ditch (24CB1731) is also about five miles in length and carries water to one or two users in the lower Rock Creek valley. It is the intent of the project to replace the existing RCP with a new RCP and rechannel 105-feet of the ditch to accommodate the replacement. That would constitute about .39% of the entire length of the ditch. The historic function and capacity of the ditch would be perpetuated with more than 99% of the ditch located outside the APE of the project. The proposed project would have No Effect to the Carbonado Ditch.

About three miles of the Hoyle Ditch (24CB1761) is located near the Red Lodge - North project area with about 2,500-feet located within the existing R/W of U.S 212. It is the intent of the project to relocate 2,401-feet of the ditch outside the R/W boundary and, thus, remove a hazard adjacent to the road. The existing ditch parallels the roadway. The proposed new alignment would also parallel the existing alignment - except it would be located outside the R/W line. There would be no change in the historic function of the ditch and its dimensions would be matched for its new alignment. None of the criteria for Adverse Effect would apply to the rechanneling and the proposed project would have No Adverse Effect to the Hoyle Ditch.

In summary, the proposed project would have No Effect to 24CB1722, 24CB1724, 24CB1725, and 24CB1731. There would be No Adverse Effect to 24CB1723,

Jun-20-05

08:18am

From-MDT CONSULTANT DESIGN SECTION

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24CB1726, 24CB1727, 24CB1728, 24CB1729, 24CB1730, and 24CB1761. We request your concurrence.

If you have any questions, please contact me at 444-6258.

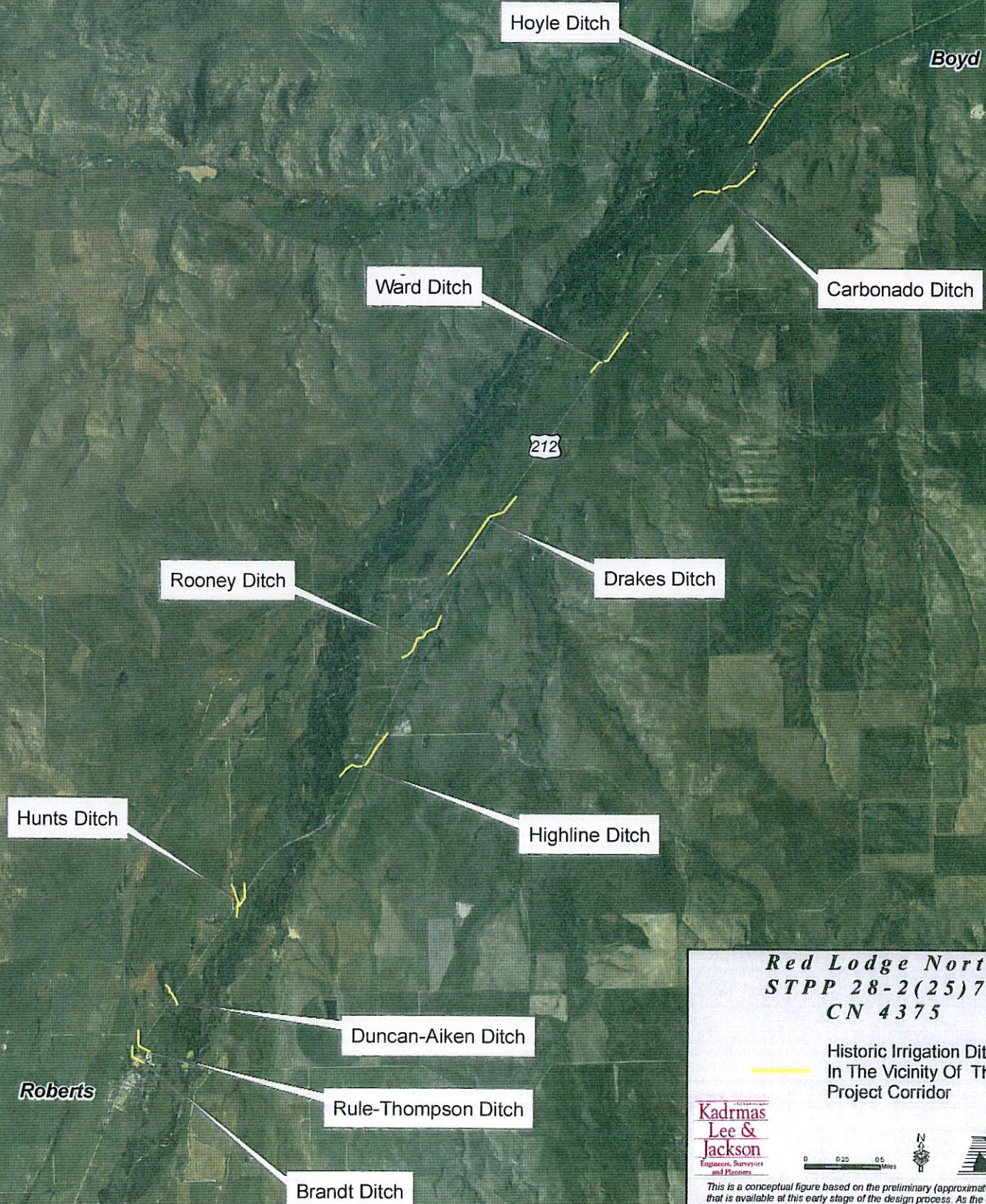


Jon Axline, Historian
Environmental Services

cc: Bruce Barrett, Billings District Administrator
Tom Martin, P.E., Consultant Design
Bonnie Steg, Resources Section

Historic Irrigation Ditches

Section 4(f) De Minimis Impacts



Red Lodge North
STPP 28-2(25)70
CN 4375

Historic Irrigation Ditches
In The Vicinity Of The
Project Corridor

Kadmas
Lee &
Jackson
Engineers, Surveyors
and Planners

0 0.25 0.5 Miles



This is a conceptual figure based on the preliminary (approximately 30%) design that is available at this early stage of the design process. As the design process continues and as additional avoidance, minimization and mitigation strategies are evaluated, potential impacts may change slightly.